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Dispatch Process Improvement

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STATE DOCUMENTS

Dispatch Process Improvement

The goal of this project is to make available to a Request for Proposal (RFP) team documentation of the South Carolina Forestry Commission's current Computer Aided Dispatch System (CADS) plus, provide them with input gathered from dispatchers and managers across the agency. Based on this data, the RFP team can better prepare an RFP for a new CADS system.

The South Carolina Forestry Commission's three dispatch centers, located in Florence, Newberry, and Walterboro, South Carolina are primary points of contact for the public. CADS was developed and put to use in the three dispatch centers in 1997. Each center is responsible for one-third of the state and has the ability, through database replication, to dispatch for the entire state should the need arise.

To ensure their future health, South Carolina's forests must be protected from harm due to natural and human-caused factors.¹ Centers dispatch fire-fighting personnel to reported wildland fires. CADS, along with mapping software, provide dispatchers with the ability to plot reported wildland fires and locate the closest available resource for fire suppression.

Centers are also responsible for taking burn notifications from the public and administering the Smoke Management program. The *South Carolina Smoke Management Guidelines provide for minimizing the impact of smoke from vegetative debris burning*

¹ South Carolina Forestry Commission, Strategic Plan (May 2001), p.11.

*operations*². *Daily compliance with the smoke management guidelines will be coordinated by the appropriate SC Forestry Commission Dispatch Center.*³

After seven years of use, the South Carolina Forestry Commission is ready to examine possibilities for CADS improvement. One discrepancy in the system that warrants significant attention is documentation of work processes. In short, "*Critical agency work processes are not documented.*"⁴ The Commission is in the process of developing a Request for Proposal to update the current dispatching software. To develop the narrative description and technical requirements, an RFP team will need documentation of the existing environment, CADS, in order to write specifications for a new system. The RFP specifications will encourage creative thinking by suppliers and allow them to offer a wide array of potential solutions and prices. The Forestry Commission, based on what most closely meets their needs and budget, can then make a vendor selection.

Gathering data, about the current software, required examination of all data entry screens (See Appendix A). Basic flow charts of these screens, based on tab key order, give the impression of fluidity. However, close examination and actual use show the dictated tab order does not provide the most efficient way to collect and record data. In the case of a notification, burn type must be determined initially in order to direct a call properly. Another issue of collecting and recording data is within the data entry screens

² South Carolina Forestry Commission, Smoke Management Guidelines for Vegetative Debris Burning Operations in the State of South Carolina (November 1998), p.4

³ South Carolina Forestry Commission, Smoke Management Guidelines for Vegetative Debris Burning Operations in the State of South Carolina (November 1998), p.5.

⁴South Carolina Forestry Commission Malcolm Baldrige National Quality Award Criteria Team Assessment Report (2002), p. 5.

themselves. For instance, there is a lack of separation between initial data entry on a fire incident and data added later. For further examples, see Appendix A.

Based on input solicited from dispatchers at all three centers, the tab order is not used but “worked-around.” This system circumvention allows dispatchers to avoid gathering information that may not be needed (See Appendix B). While fluctuations occur in the smoke management area of these flow charts, the majority of these indicate the query of burn type first. Fire call flow charts show similarities within dispatch centers but extremely varied patterns among the three dispatch centers. Variations may be due to shortcomings of the CADS software as well as “work-arounds” employed. Further probable causes fall beyond the scope of this project.

Categorized suggestions based on which aspects of fire control operations will most benefit from their integration into a new system, are the result of a canvas of Forestry Commission managers in both Forest Protection and Forest Management branches. Input from participants will provide insight into what various managers feel is needed. Planning for fire control operations requires a thorough insight into current and future weather conditions, resource needs, and fire behavior characteristics (Ex: size, movement and potential for wildland fire growth). Current ground operations relative to containment and control of wildfire need aircraft and equipment tracking by Automatic Vehicle Locator (AVL) and more integrated smoke management capability. Logistics involve current, future, and ongoing fire control resourcing, which include recording duty status daily and tracking non-SCFC resources. Quality control issues, exclusive to operations of systems, primarily involve software capability. For the categorized list, in its entirety, see Appendix C.

Incorporated with the aforementioned screens are information data screens, that provide filtering/sorting capabilities, as well as access to other pertinent data, such as the number of active fires and number of resources dispatched (See Appendix D). Use of these screens provide valuable “at a glance” information to dispatchers and fire managers. Many of these screens give a table-format view with focused information of the highlighted item listed at the bottom of that screen. Complete appendix listing; of what screens display and provide access to, is included underneath each screen print.

Information gathered to this point supports the Forestry Commission’s request that “*Dispatch system software, equipment, and staffing will be updated to perform to expectations*⁵.” Recommendations by the RFP team will incorporate project data into new CADS system specifications.

⁵ South Carolina Forestry Commission, Strategic Plan (May 2001), p.11.

Appendix A

Current System Data Entry Screens with corresponding flow charts of tab order.

CADS Notification General Information (Screen 1 of 2)

General Information Smoke Management

Name:

Company:

Phone #:

CPFM #:

Address:

Latitude: deg min sec

Longitude: deg min sec

Region:

- ☐ Coastal
- ☐ Pee Dee
- ☐ Piedmont

County:

Category Day:

Choose either the Smoke Management or Other Notifications tab to enter remaining notification data.

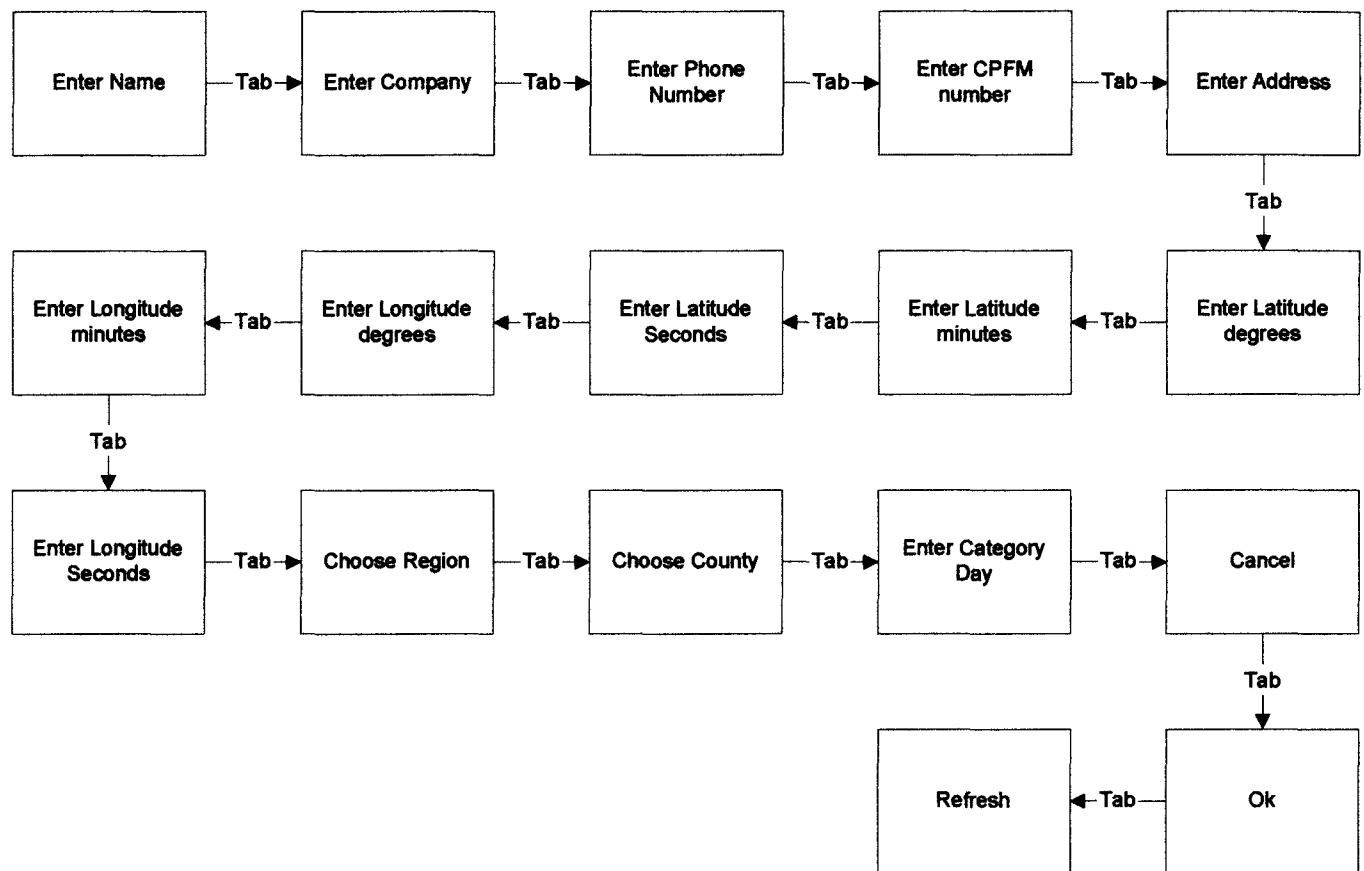
Tab order:

- | | |
|---|-------------------|
| 1. Name | 10. Longitude min |
| 2. Company | 11. Longitude sec |
| 3. Phone # | Region choice: |
| 4. CPFM # [certified prescribed fire manager] | 12. Coastal |
| 5. Address | 13. Pee Dee |
| 6. Latitude deg | 14. Piedmont |
| 7. Latitude min | 15. County |
| 8. Latitude sec | 16. Category Day |
| 9. Longitude deg | 17. Cancel |
| | 18. OK |
| | 19. Refresh Map |

Problems:

- Backspace key does not work in phone field
- Company is not available to view after initial entry
- Must choose region before county choice is available
- Category day is a require field that is entered manually, however it does not show on any notification summary
- MapInfo is used separately to locate burn site, MapInfo tool will insert lat/long

CADS Notification Entry Screen 1



Must mouse click Smoke Mgt tab to reach second page of notification process

Smoke Management (Screen 2 of 2)

Home | Map | Settings | Smoke Management | Filter | Calculations | About | Help

Burn Type:

☒ Hazard Red
 ☐ Wildlife Mgt.
 ☐ Field and Pasture
 ☐ Disease Control

☐ Hardwood
 ☐ Piled Debris
 ☐ Slash in Place
 ☐ Ditch and Hedge

Acres to be Burned
 Available Tons/Acre
 = Total Tons

Smoke-Sensitive Area
 Distance
 Start Time 00:00

Tonnage Limits
 Forecast Smoke Mgt.

Compliance

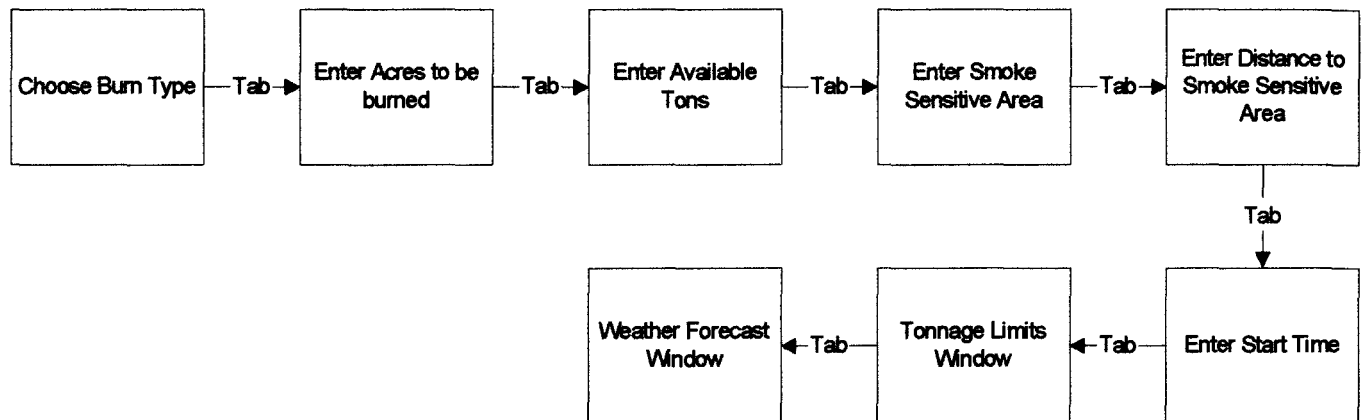
☐ Compliant
 ☐ Non-Compliant

Refresh Map
 OK
 Cancel

Burn Types:			
1.	Hazard Red.	11.	Smoke Sensitive
2.	Wildlife Mgt.	12.	Distance to smoke sensitive area
3.	Field and Pasture	13.	Start Time
4.	Disease Control	14.	Tonnage Limits
5.	Hardwood	15.	Forecast/Smoke Mgt.
6.	Piled Debris	16.	Compliant
7.	Slash in Place	17.	Non-Compliant
8.	Ditch and Hedge	18.	Cancel
9.	Acres to be Burned	19.	OK
10.	Available tons/acre [fuel to burn]	20.	Refresh Map

- If burn type is not smoke management, callers are given the appropriate county 800 number to give notification.
- Total tons is a calculated field that cannot be viewed unless the notification summary is printed
- Forecast/Smoke Mgt. Button no longer works

CADS Notification Flowchart Screen 2



CADS Incident Report Dispatch Fire Incident [Initial data entry]

CADS Incident Report Dispatch

Fire Incident | Incident Summary | Other Dispatch

☒ SCFC Air ☐ Emergency Svcs. ☐ Public

Situation:

Caller: _____

Call Back #: 000-000-0000

Incident #: 03133394

Latitude: deg min sec

Longitude: deg min sec

Address: _____

Description: _____

Region:

☐ Coastal

☐ Pee Dee

☐ Piedmont

County: _____

On Scene:

☐ Aircraft

☐ EMS

☐ Fire Department

☐ Law Enforcement

☐ Media

☐ Public

Values Threatened:

☐ Homes ☐ Plantation

☐ Buildings ☐ Timber

☐ Vehicles ☐ Grass

☐ Other

Refresh Map OK Cancel Resource Allocation

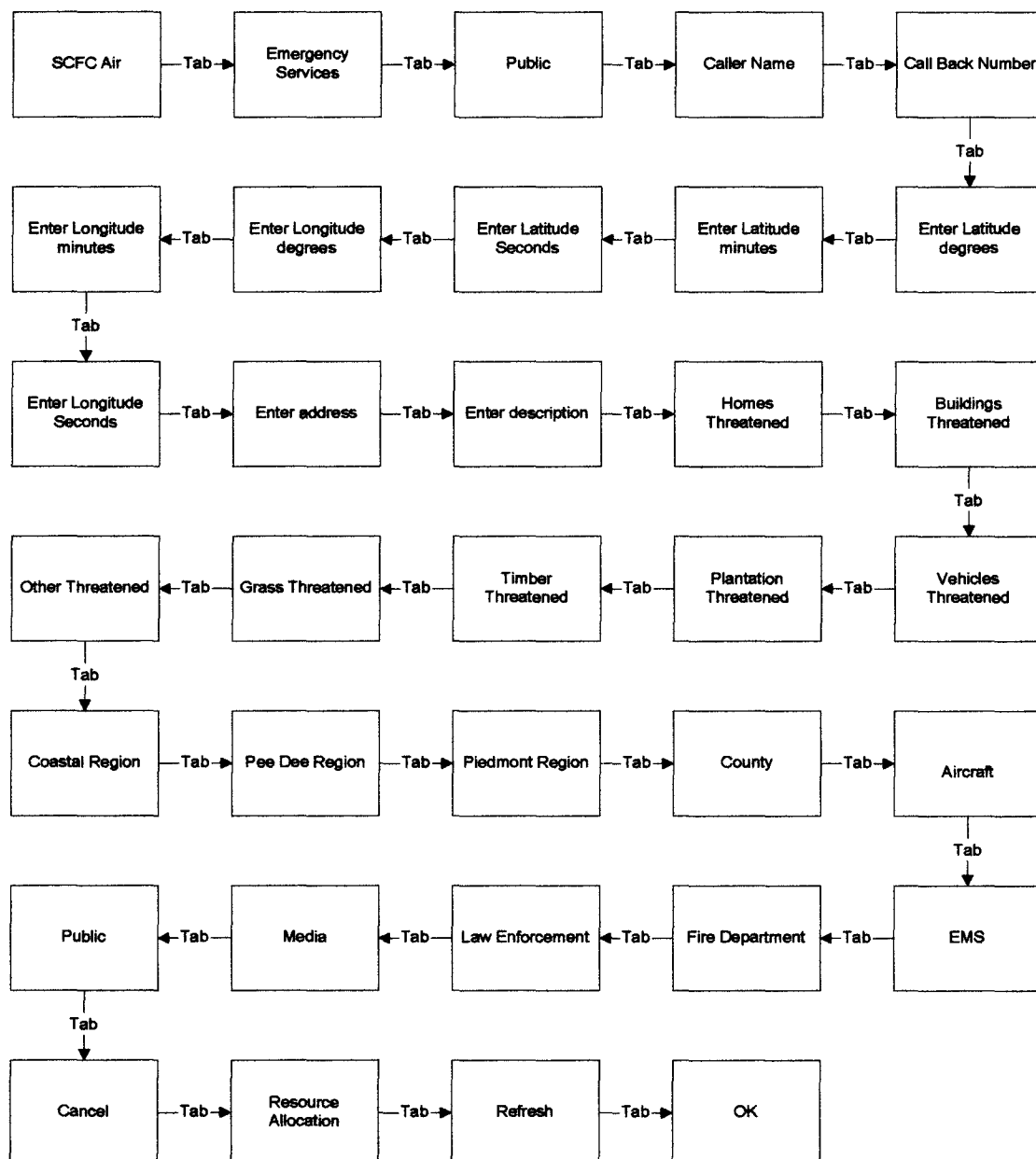
Tab order:

Detection method:			
1.	SCFC Air	15.	Buildings
2.	Emergency Svcs.	16.	Vehicles
3.	Public	Types of wildland fuel	
4.	Caller	17.	Plantation
5.	Call Back #	18.	Timber
6.	Latitude deg	19.	Grass
7.	Latitude min	20.	Other
8.	Latitude sec	21.	Description of Other Values [opens only if "Other" field is chosen]
9.	Longitude deg	22.	Coastal
10.	Longitude min	23.	Pee Dee
11.	Longitude sec	24.	Piedmont
12.	Address	25.	County
13.	Description	26.	Aircraft
14.	Homes	27.	EMS
		28.	Fire Department
		29.	Law Enforcement
		30.	Media
		31.	Public
		32.	Cancel
		33.	Resource Allocation
		34.	OK

Problems:

- Incident number is generated upon entry to this screen
- Default detection method is SCFC Air
- Description box becomes comment box on Incident summary resulting in lack of separation between initial data entry and new data.
- Any values threatened or resources on scene not chosen here cannot be chosen later
- Will let you continue without a callback number [no error checking]

CADS Fire Incident Screen



CADS Incident Report Dispatch Non-Fire Incident

CADS Incident Report Dispatch

☐ Fire Incident
 ☒ Non-Fire Incident
 ☐ Other Dispatch

☐ SCFC Air
 ☒ Emergency Svcs.
 ☐ Public

Situation:

Caller: _____

Call Back #: 000-000-0000

Incident #: 03133376

Latitude: deg min sec

Longitude: deg min sec

Address: _____

Description: _____

Incident Type: _____

Region:

☐ Coastal
☐ Pee Dee
☐ Piedmont

County: _____

On Scene:

☐ Aircraft
☐ EMS
☐ Fire Department
☐ Law Enforcement
☐ Media
☐ Public

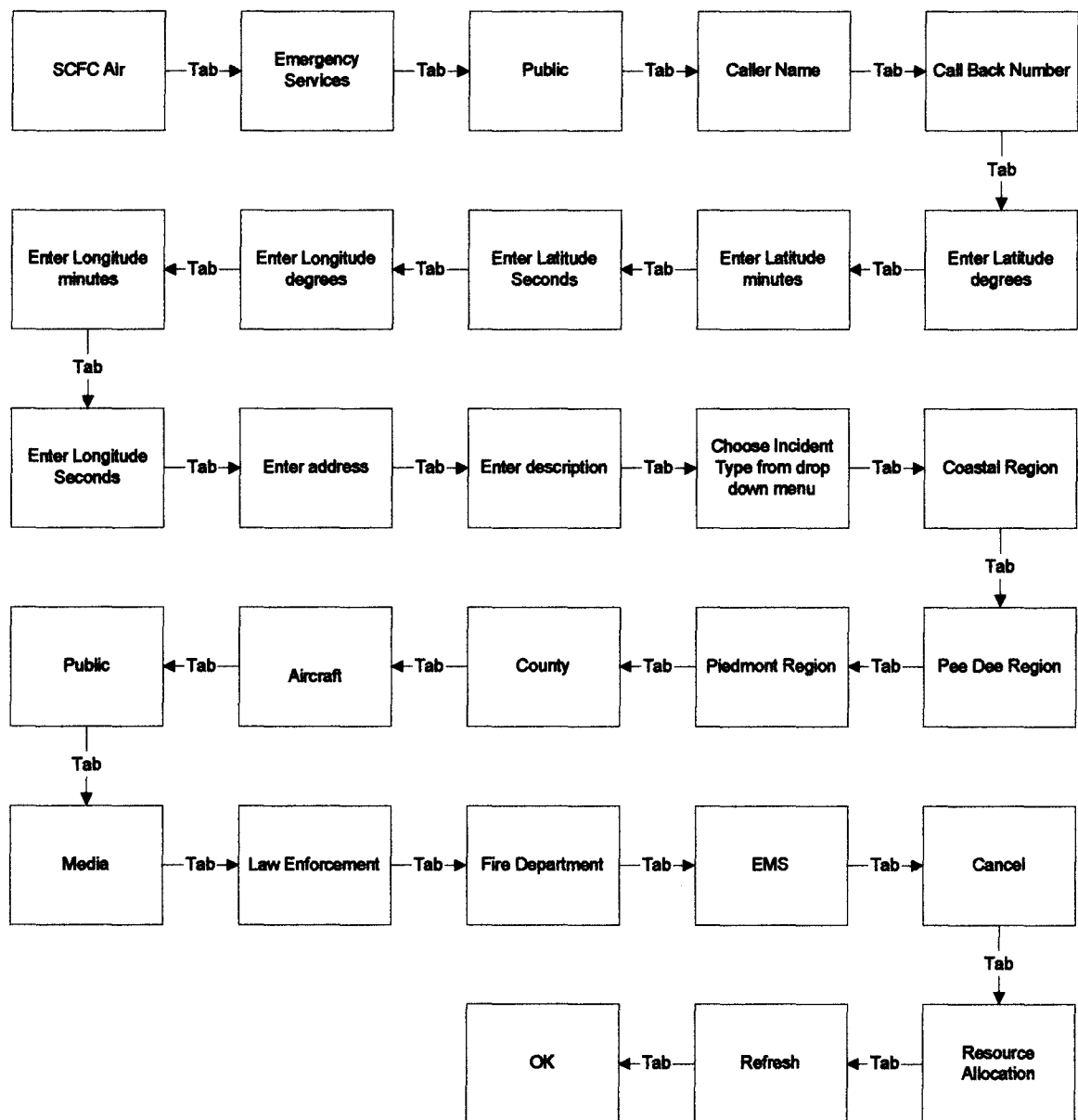
Tab order:

- | | | |
|--------------------|------------------------------------|-------------------------|
| 1. SCFC Air | 11. Longitude sec | 20. EMS |
| 2. Emergency Svcs. | 12. Address | 21. Fire Department |
| 3. Public | 13. Description | 22. Law Enforcement |
| 4. Caller | 14. Incident Type [drop down menu] | 23. Media |
| 5. Call Back # | 15. Coastal | 24. Public |
| 6. Latitude deg | 16. Pee Dee | 25. Cancel |
| 7. Latitude min | 17. Piedmont | 26. Resource Allocation |
| 8. Latitude sec | 18. County | 27. OK |
| 9. Longitude deg | 19. Aircraft | 28. Refresh Map |
| 10. Longitude min | | |

Problems:

- o Format almost identical to fire incident, exception is Incident type drop down, this prevents use of require fields

Non-Fire Incident



Incident Summary

Contained: 14:30:59		Controlled: 14:31:00		Readiness Incident	
Values Destroyed/Damaged/Threatened:					
Enter these for total acres	Total Acres:	30	Threatened	Est. Start Time:	01/27/03 08:00
	Forestland Acres:	30		Size at IA:	15
	Non-Forestland Acres:			Landowner:	INTERNATIONAL PAPER
	Acres Planted Pine:	30		Incident Commander: (click to search)	B-2-2(Not Alone)
	Plantation Age:	15		Interstate Fire:	<input type="checkbox"/>
	Homes Destroyed:	\$		Acres In Corporate Limits:	
	Homes Damaged:	\$		Federal Acres:	
	Buildings Destroyed:	\$		Cause:	Equipment Use
	Buildings Damaged:	\$		Mark as Complete:	<input checked="" type="checkbox"/>
	Vehicles Damaged:	\$			
Other Losses:					
Comments: FIRE. I SPOKE WITH STEVE BROWN WITH INTERNATIONAL PAPER AT 15:00 ABOUT THIS FIRE. C-37 B-2-2 BELIEVES THAT THE POWER COMPANY MUST HAVE DROPPED.			SCFC Injuries: <input type="checkbox"/> Other Injuries: <input type="checkbox"/> SCFC Fatalities: <input type="checkbox"/> Other Fatalities: <input type="checkbox"/>		
			On Scene: EMS <input type="checkbox"/> Aircraft <input type="checkbox"/> Public <input type="checkbox"/> Media <input type="checkbox"/> Fire Department <input checked="" type="checkbox"/> Law Enforcement <input type="checkbox"/>		
Violations and Suspects		OK		Cancel	
				Dispatch Resources	

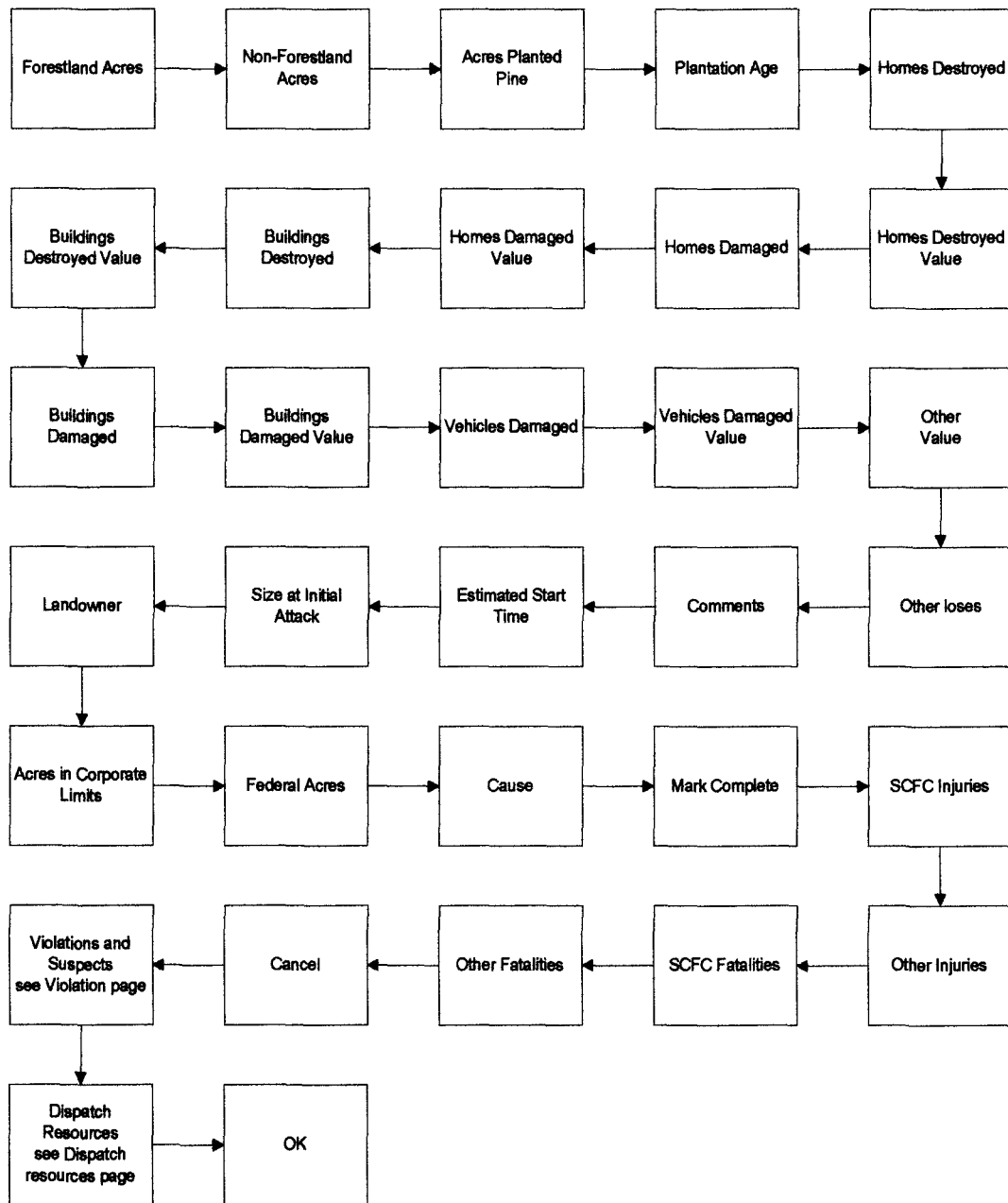
Tab order:

- | | | |
|--------------------------|-------------------------------|-------------------------------|
| 1. Forestland Acres | 10. Buildings Destroyed value | 22. Acres in Corporate Limits |
| 2. Non-Forestland Acres | 11. Buildings Damaged | 23. Federal Acres |
| 3. Acres Planted Pine | 12. Buildings Damaged value | 24. Cause |
| 4. Plantation Age | 13. Vehicles Damaged | 25. Mark as Complete |
| 5. Homes Destroyed | 14. Vehicles Damaged value | 26. SCFC Injuries |
| 6. Homes Destroyed value | 15. Other Losses value | 27. Other Injuries |
| 7. Homes Damaged | 16. Other Losses | 28. SCFC Fatalities |
| 8. Homes Damaged value | 17. Comments | 29. Other Fatalities |
| 9. Buildings Destroyed | 18. Est. Start Time | 30. Cancel |
| | 19. Size at IA | 31. Violations and Suspects |
| | 20. Landowner | 32. Dispatch Resources |
| | 21. Interstate Fire | 33. OK |

Problems:

- Threatened column does not indicate what in particular is threatened
- No error checks (example: If acres planted pine must enter plantation age)
- Comments become a part of Description from initial entry screen
- Dispatcher cannot change Incident Commander
- On scene resources cannot be added

Incident Summary



Violations and Suspects

Violations and Suspects - Incident # 113107

Violation	Name of Violator	Phone	Description

Add Violation **Delete Current Violation** **Reset to Original Violations**

Suspect Name	Comments

Add Suspect **Delete Current Suspect** **Reset to Original Suspects**

Save Changes **Cancel**

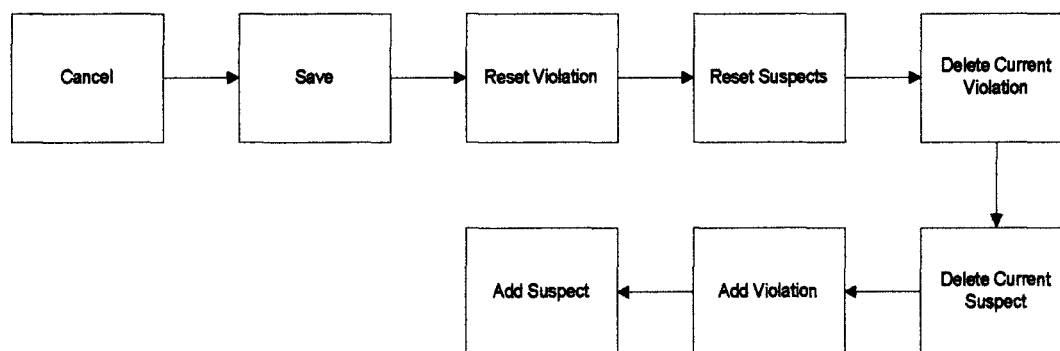
Tab order:

1. Cancel
2. Save Changes
3. Reset to Original Violations
4. Reset to Original Suspects
5. Delete Current Violation
6. Delete Current Suspect
7. Add Violation
8. Add Suspect

Problems:

- Name of violator is a required field, but we have not been tracking, should examine need
- None is not a choice for laws violated

Violations and Suspects



Personnel Search

Personnel Search

Call sign: Last Name:

Qualification: Equipment:

Last Name	Preferred Name	MI	Call Sign	Phone	Alt Phone	Pager Number	Business F

Personnel returned: 1

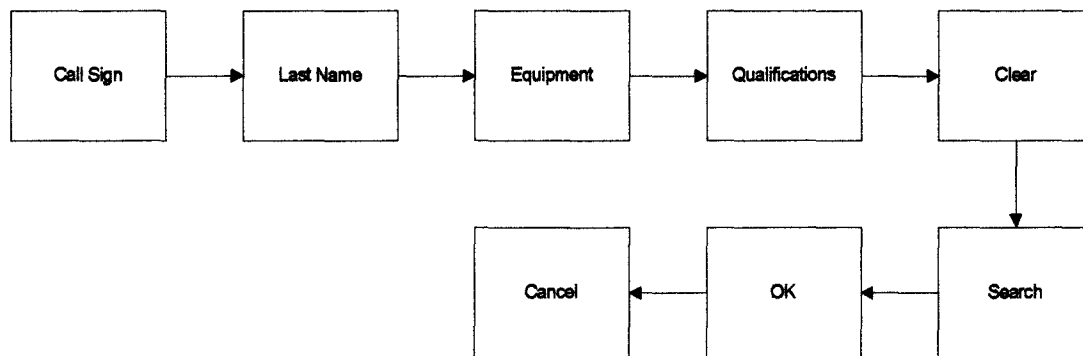
Tab order:

1. Callsign
2. Last Name
3. Equipment
4. Qualifications
5. Clear Criteria
6. Search by Full of Partial Criteria
7. Activates highlighted personnel
8. OK
9. Cancel

Problems:

- Gets stuck in a loop and have to shut down CADS and restart

Personnel Search



CADS Incident Report Dispatch Other Dispatch

Other Dispatch

Call Sign: **No Personnel Selected**

Location

Latitude: deg min sec

Longitude: deg min sec

☐ Available

Activity

☐ Tactical Position ☐ Investigation ☐ Meeting/Training
☐ Firebreak Plow ☐ Court Appearance ☐ I and E
☐ Prescribed Burn ☐ Water Bars ☐ Work Detail
☐ Timber Marking ☐ Other For. Mgmt. ☐ Equipment Exercise
☐ Equipment Repair

Additional Info:

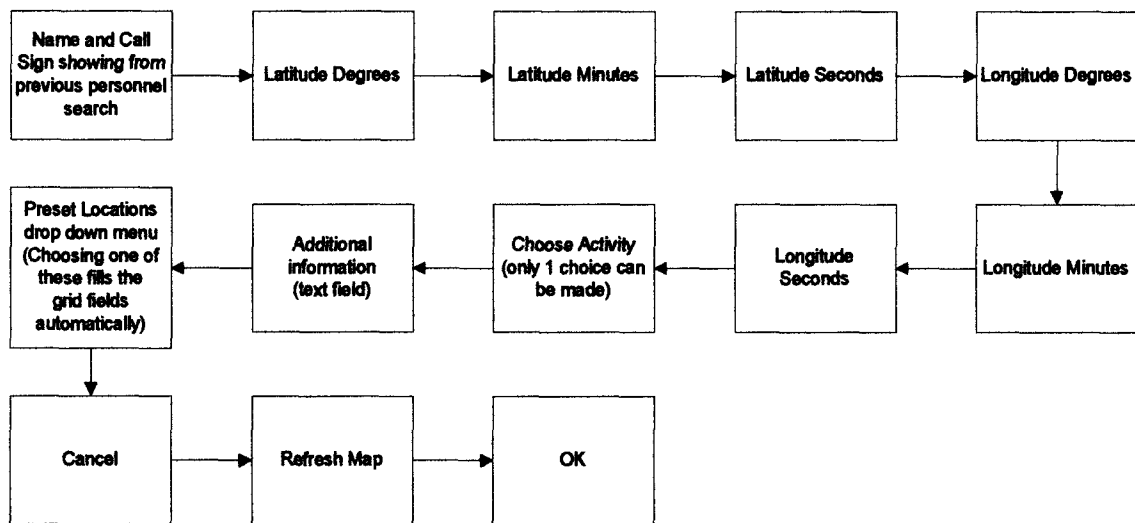
Tab order:

- | | | |
|---------------------|-------------------|---------------------|
| 1. Latitude deg | 12. Investigation | 20. Equipment |
| 2. Latitude min | 13. Court | Exercise |
| 3. Latitude sec | 14. Appearance | 21. Additional Info |
| 4. Longitude deg | 15. Water Bars | 22. Drop down |
| 5. Longitude min | 16. Other For. | menu with |
| 6. Longitude sec | Mgmt. | preset locations |
| 7. Available | 17. Equipment | [this option fills |
| 8. Tactical | Repair | lat/long |
| 9. Position | Meeting/Trainin | automatically] |
| 10. Firebreak Plow | g | 23. Cancel |
| 11. Prescribed Burn | 18. I and E | 24. Refresh Map |
| 12. Timber | 19. Work Detail | 25. OK |
| Marking | | |

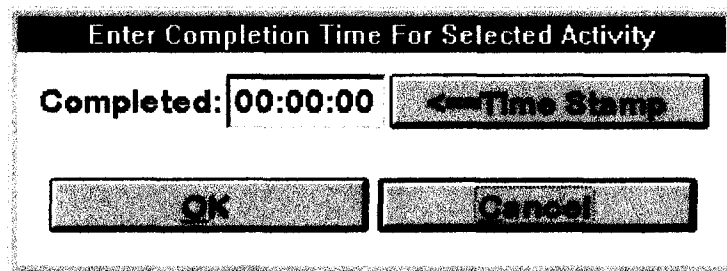
Problems:

- Availability defaults
- Can choose only one activity per dispatch
- Must time stamp resource back on stand-by then re-dispatch for additional activity

Other Dispatch



Time Completion



The screenshot shows a dialog box titled "Enter Completion Time For Selected Activity". Inside the dialog, there is a label "Completed:" followed by a text input field containing "00:00:00". To the right of the input field is a button labeled "<--Time Stamp". At the bottom of the dialog, there are two buttons: "OK" on the left and "Cancel" on the right.

When resource on bottom half of resource dispatches screen is chosen, this window appears. The only option is to time stamp, which places the resource back at standby location.

Individual Dispatch

Individual Dispatch		
Name/Call Sign:		
DON MIXON H-2-3		
Equipment Type:		
Transport:	GMC	
Tractor:	450-C	
Duty Limitations:		
None		
Page	Primary Phone	Secondary Phone
	Primary Repeat	
Contact Log:		
01/28/03 16:16:12	Primary Phone	
01/28/03 16:16:14	Contact Established	
01/28/03 16:16:16	Pager	
01/28/03 16:17:15	Primary Repeat	
Contact Established	No Contact	Cancel Allocation
En Route Time:	01/28/03 16:17:17:000	← Time Stamp
Arrive Time:	01/28/03 16:34:53:000	← Time Stamp
Available Time:	00/00/00 00:00:00:000	← Time Stamp
Standby Time:	00/00/00 00:00:00:000	← Time Stamp
OK Cancel Changes		

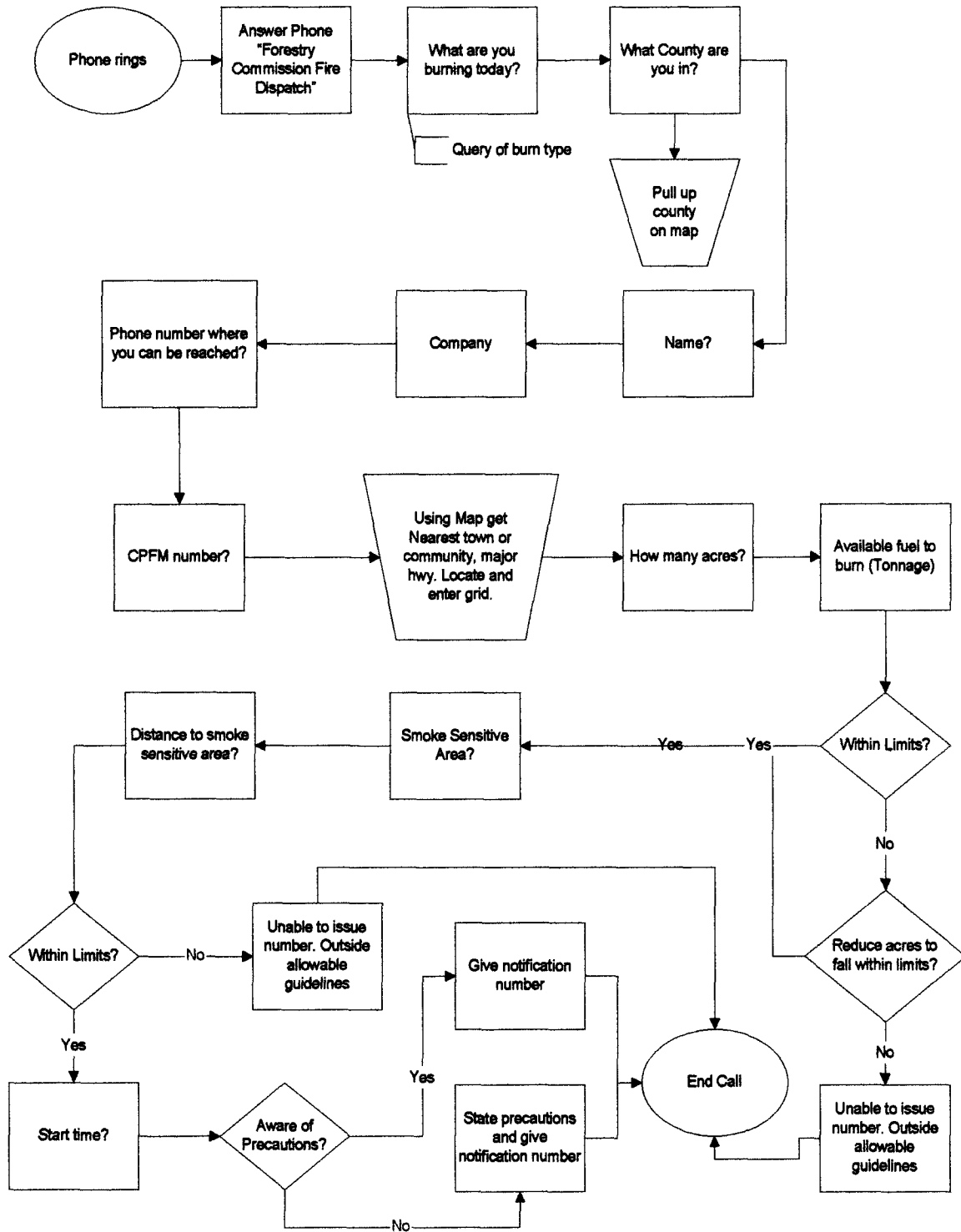
Problems:

- Contact log contains static data
- En Route, Arrive, Available, and Standby times are volatile and overwritten

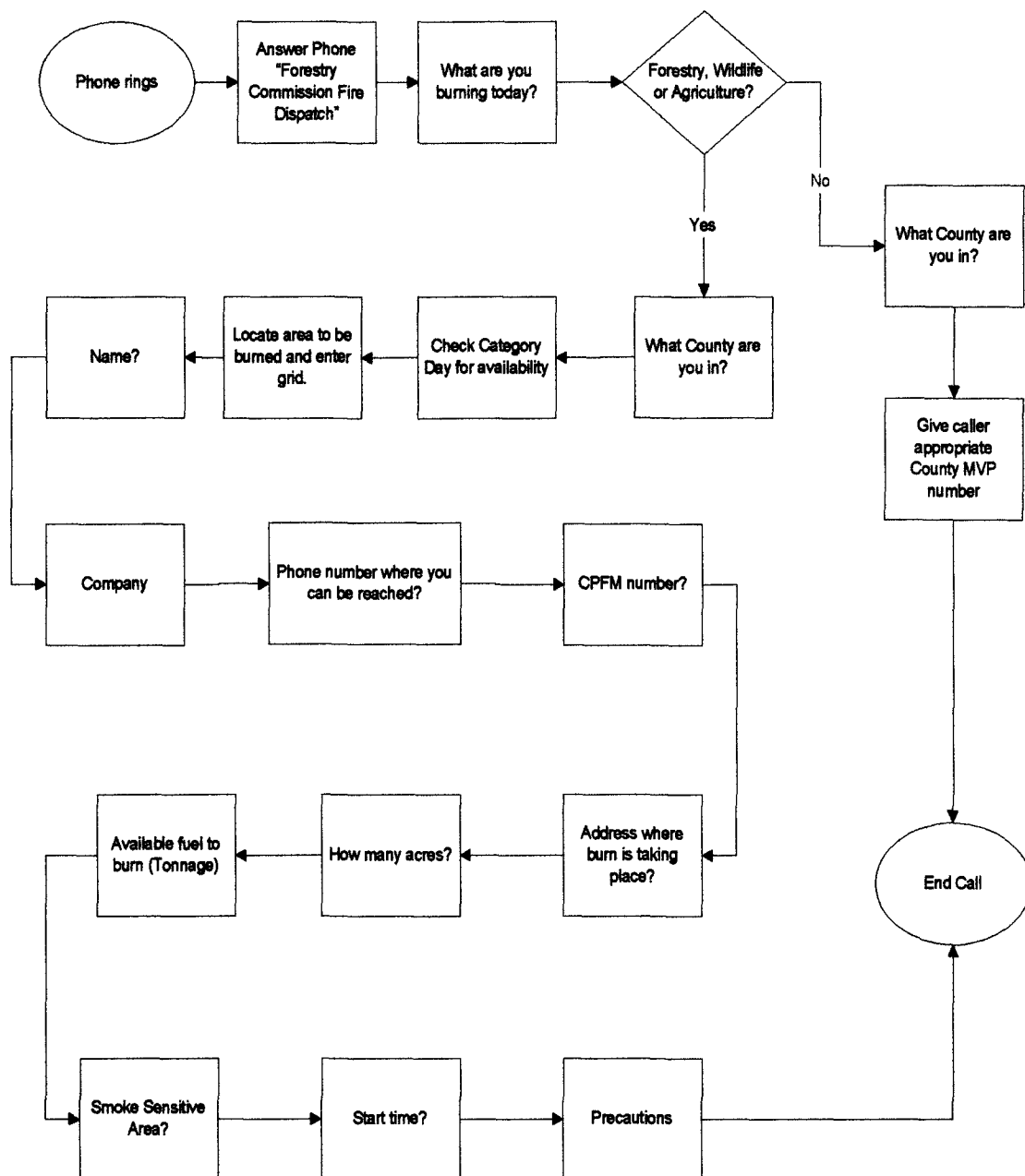
Appendix B

Input Flow Charts
Notifications and Fires

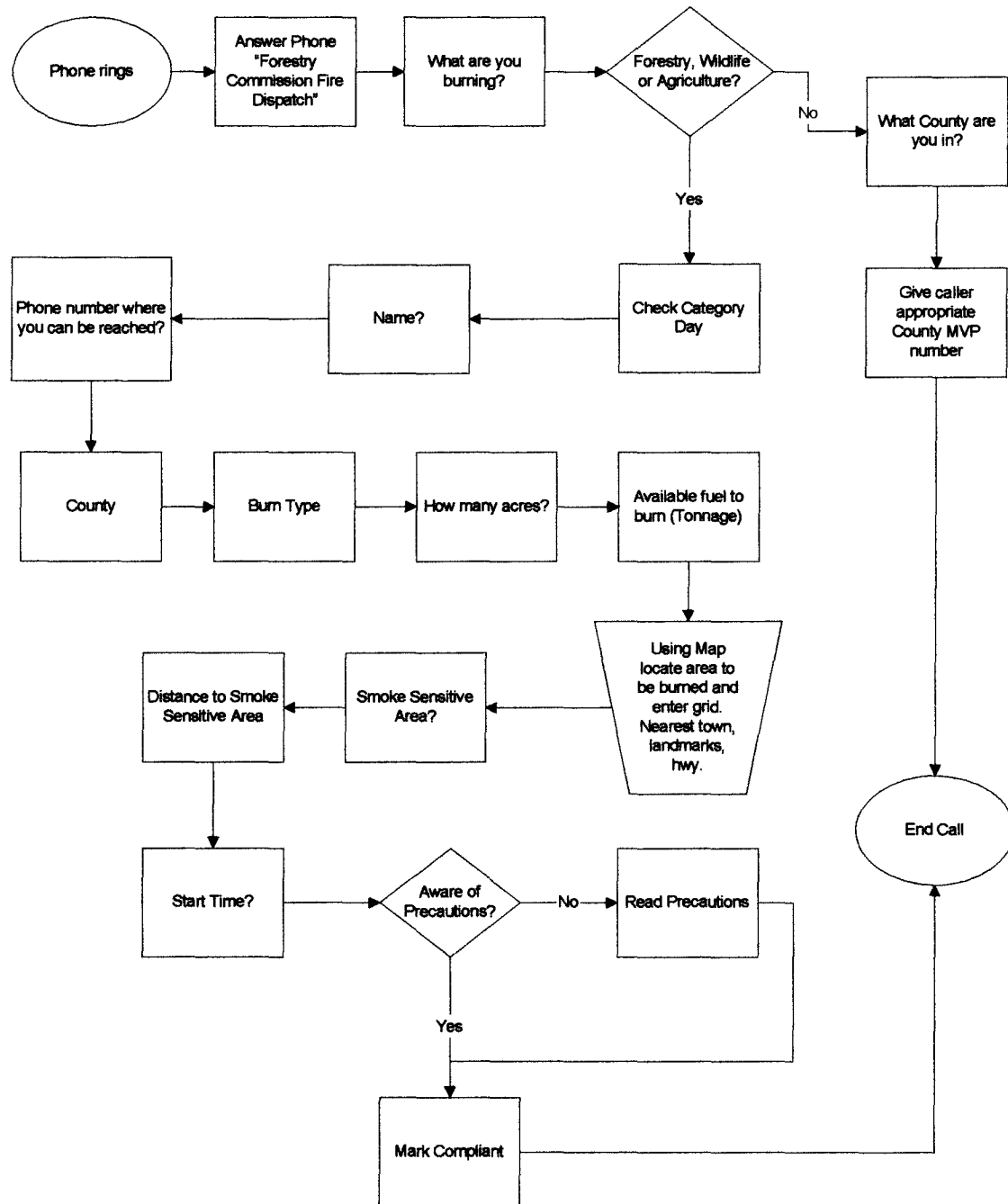
Coastal Notification Flow 1



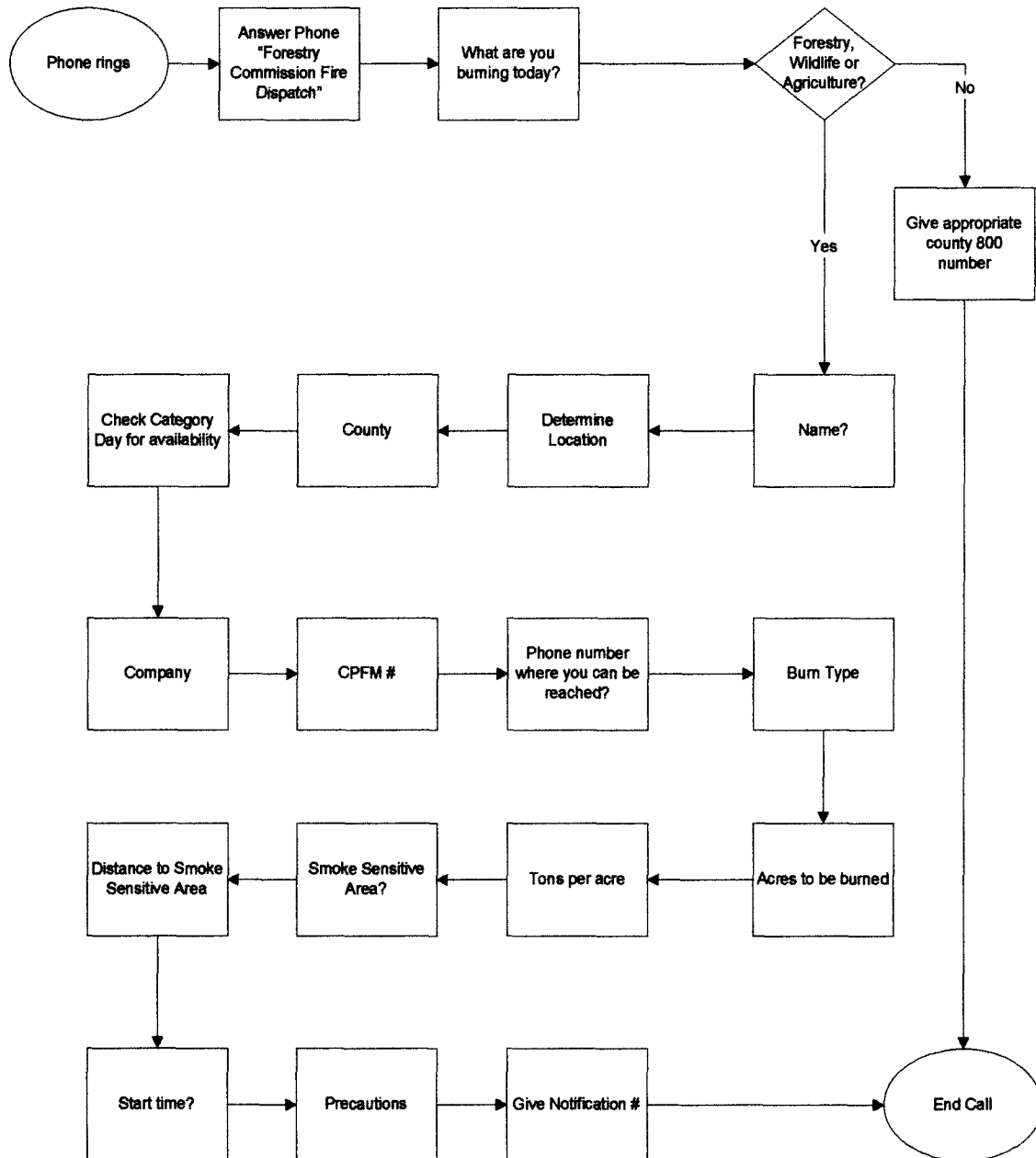
Coastal Notification Flow 2



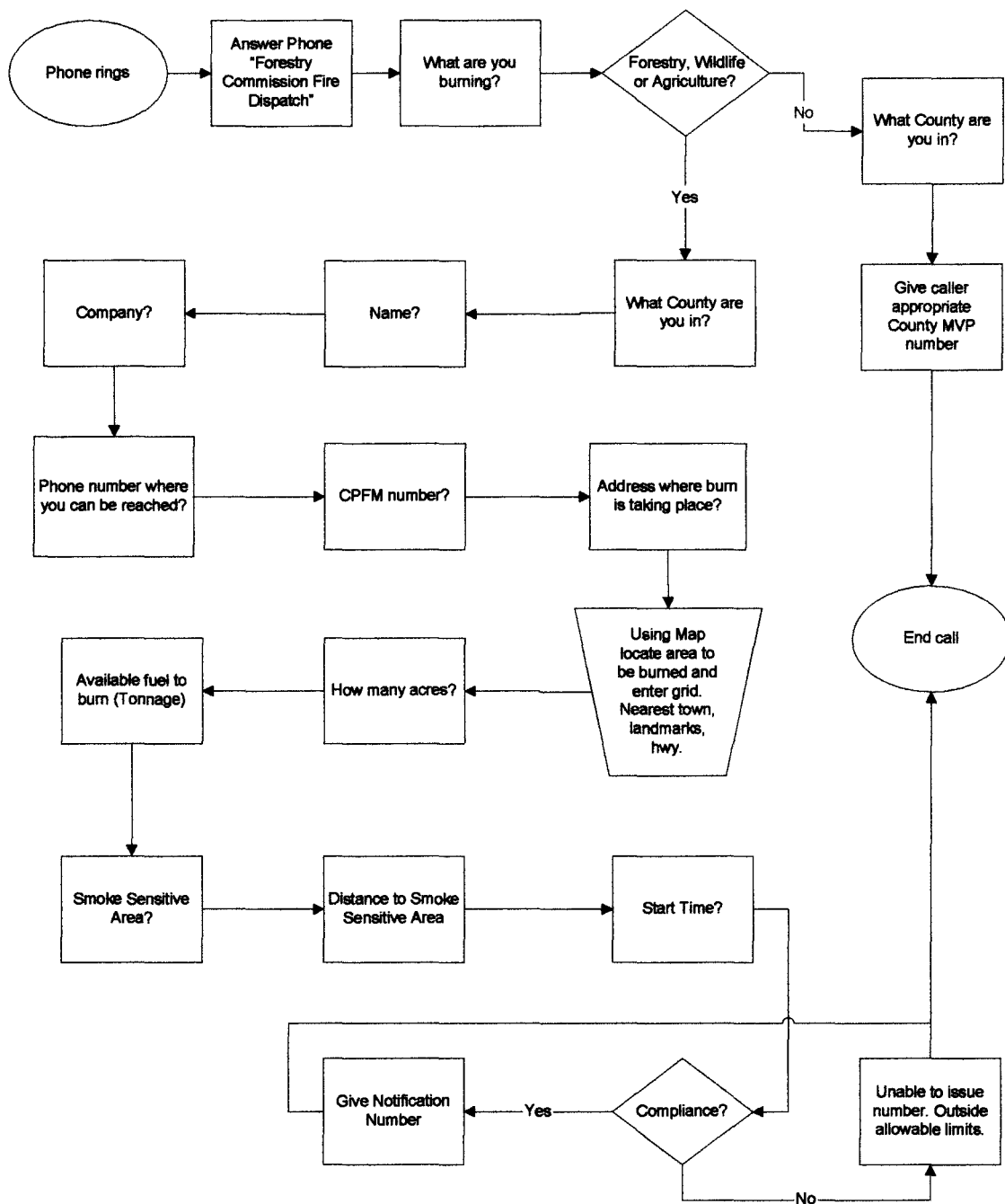
Coastal Notification Flow 3



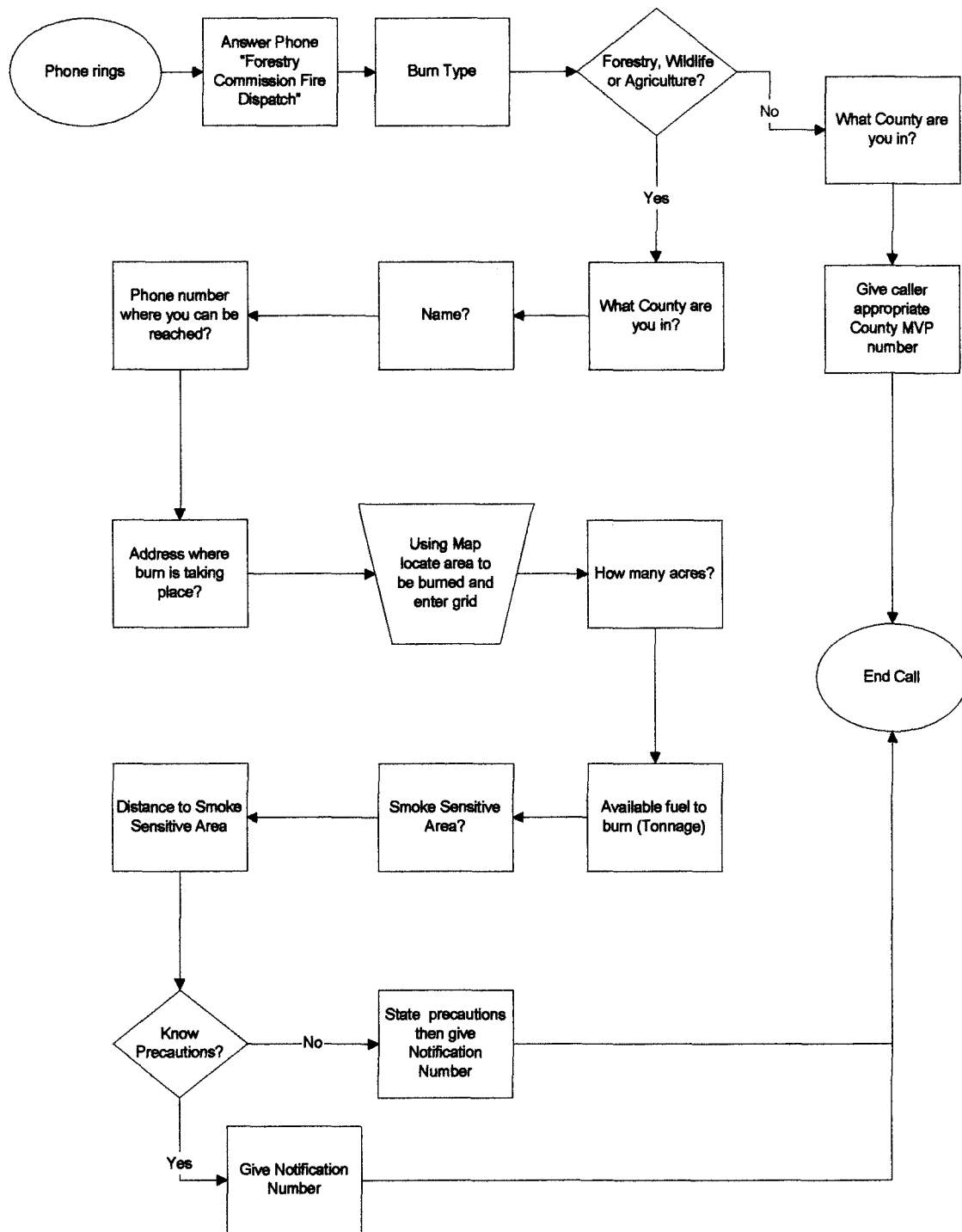
Coastal Notification Flow 4



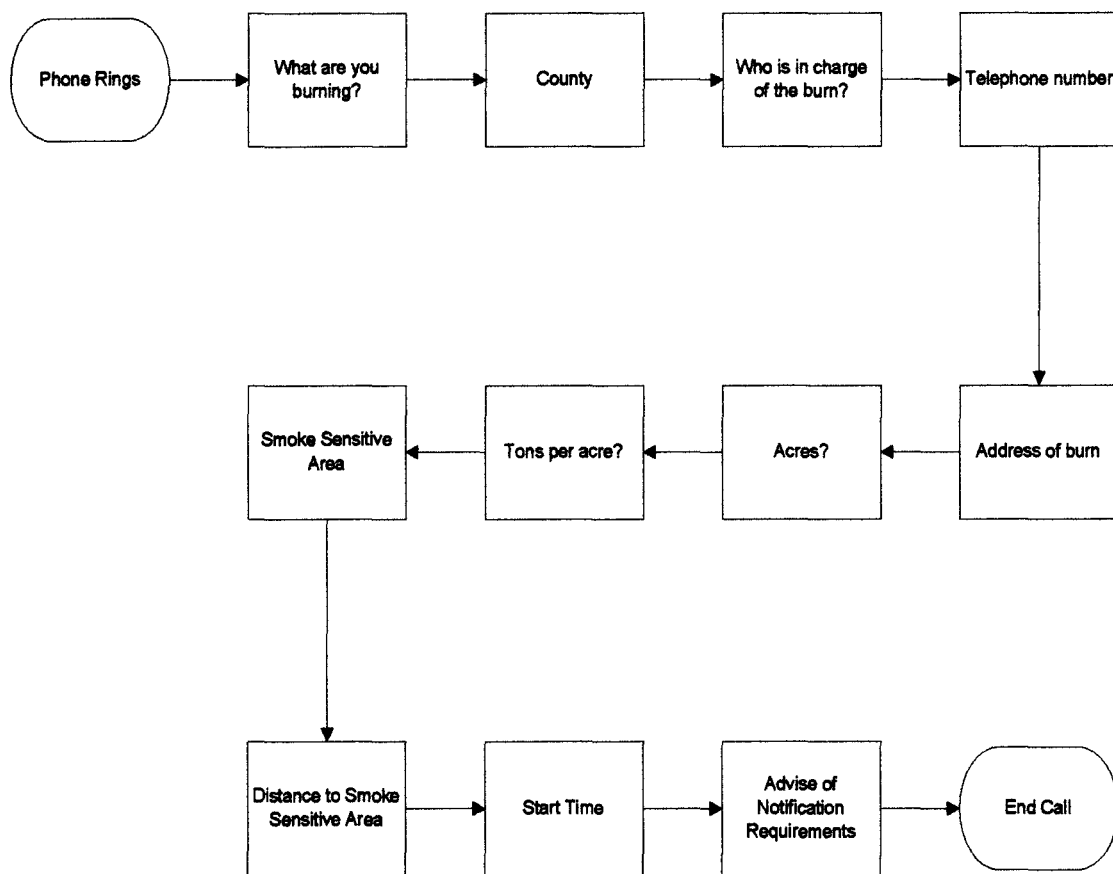
Coastal Notification Flow 5



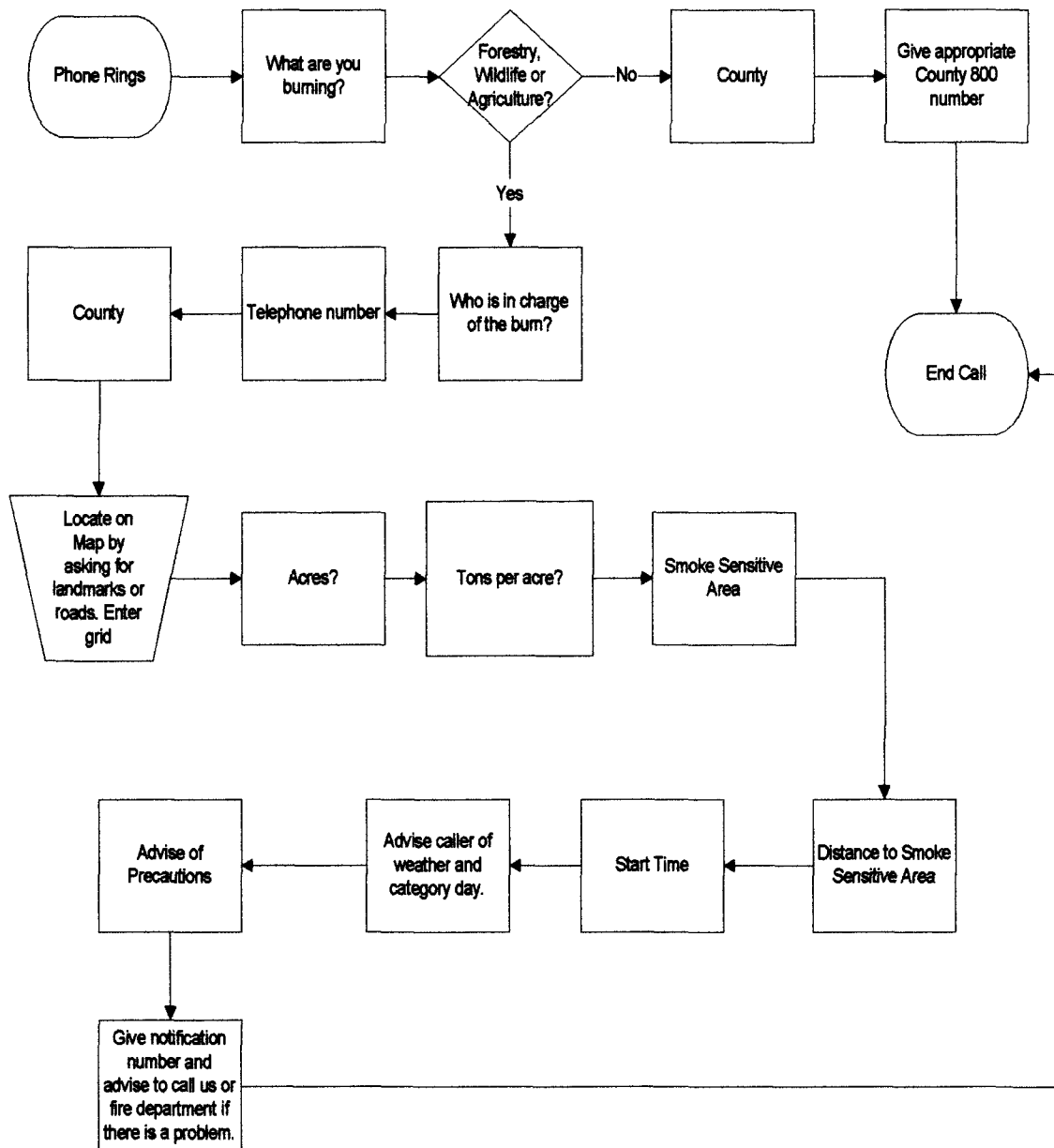
Coastal Notification Flow 6



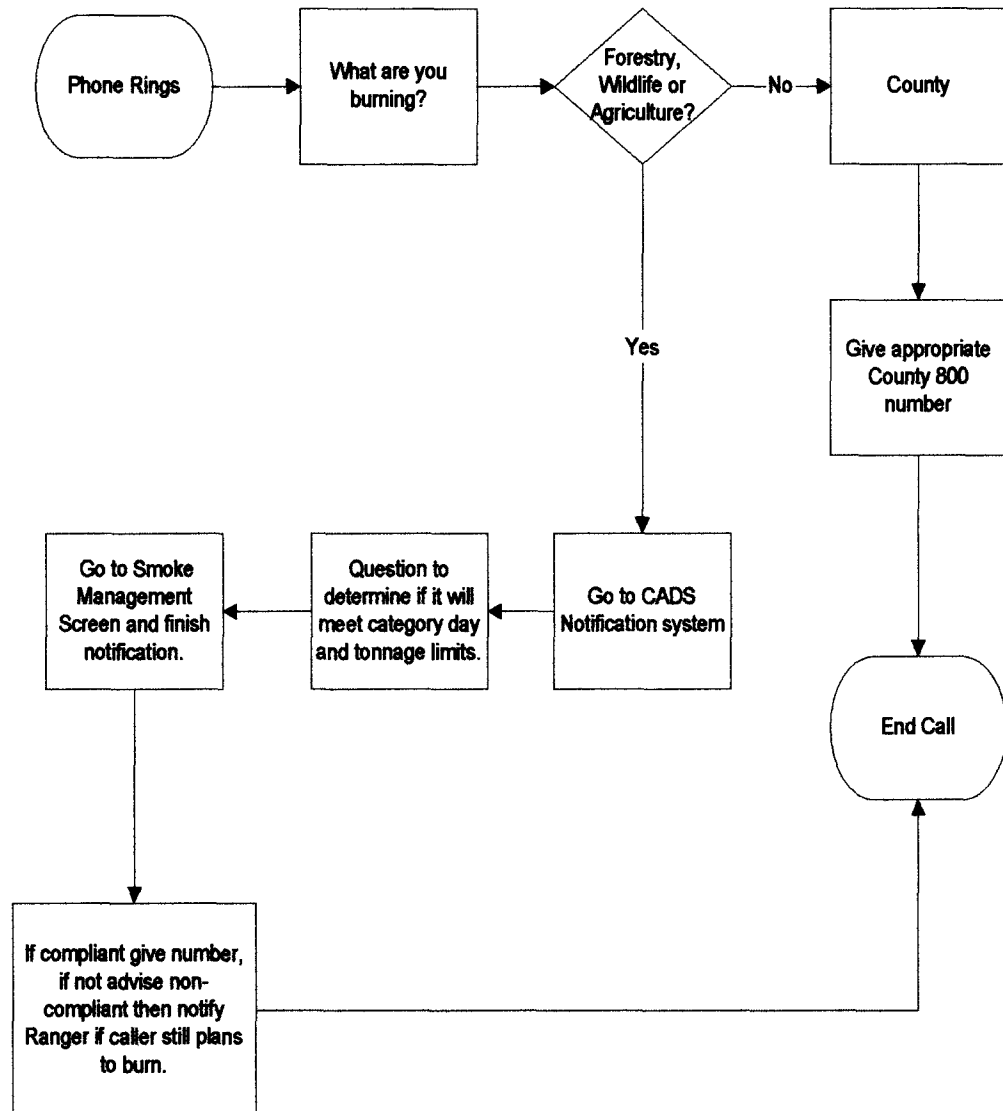
Pee Dee Notification Flow 1



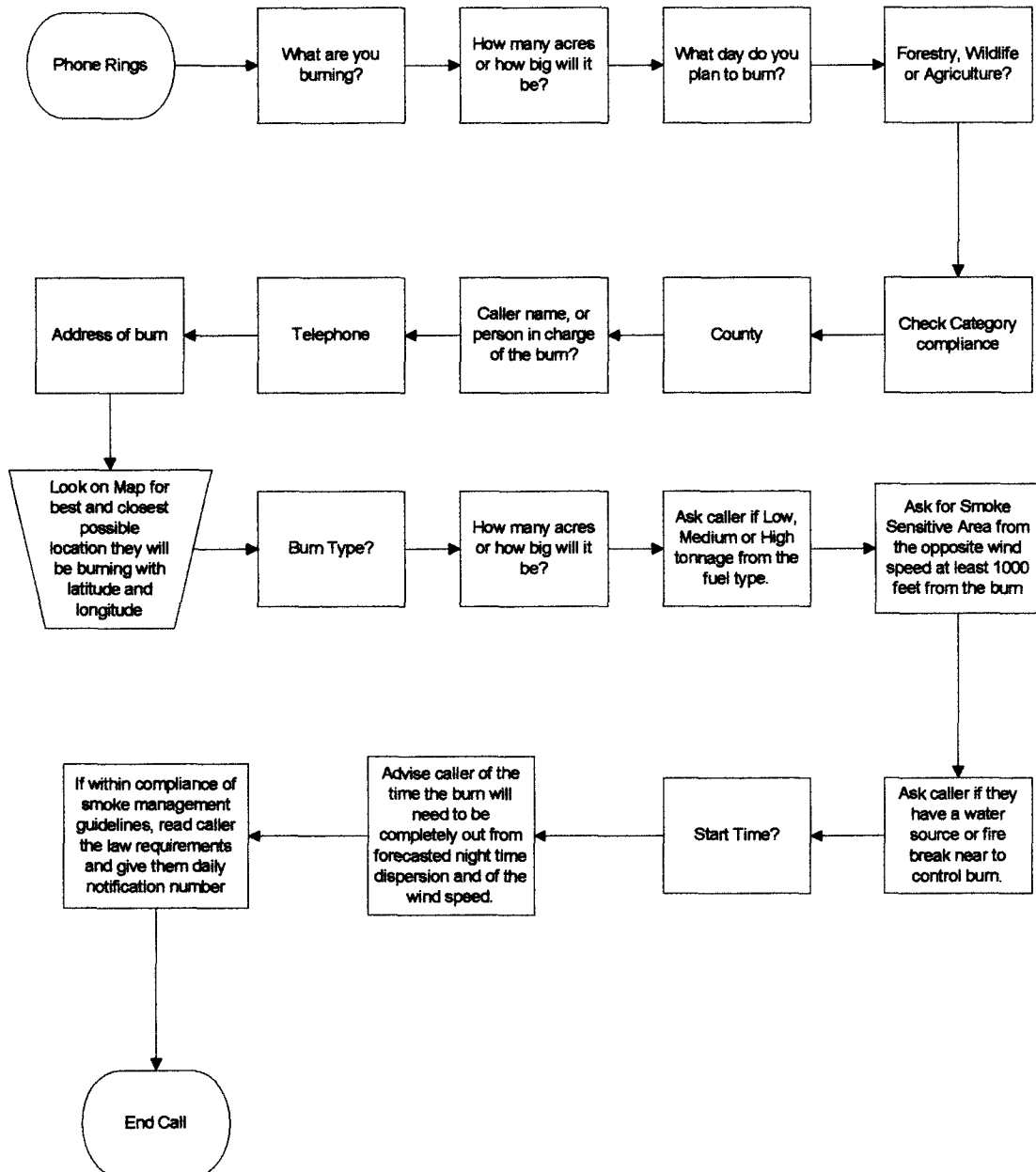
Pee Dee Notification Flow 2



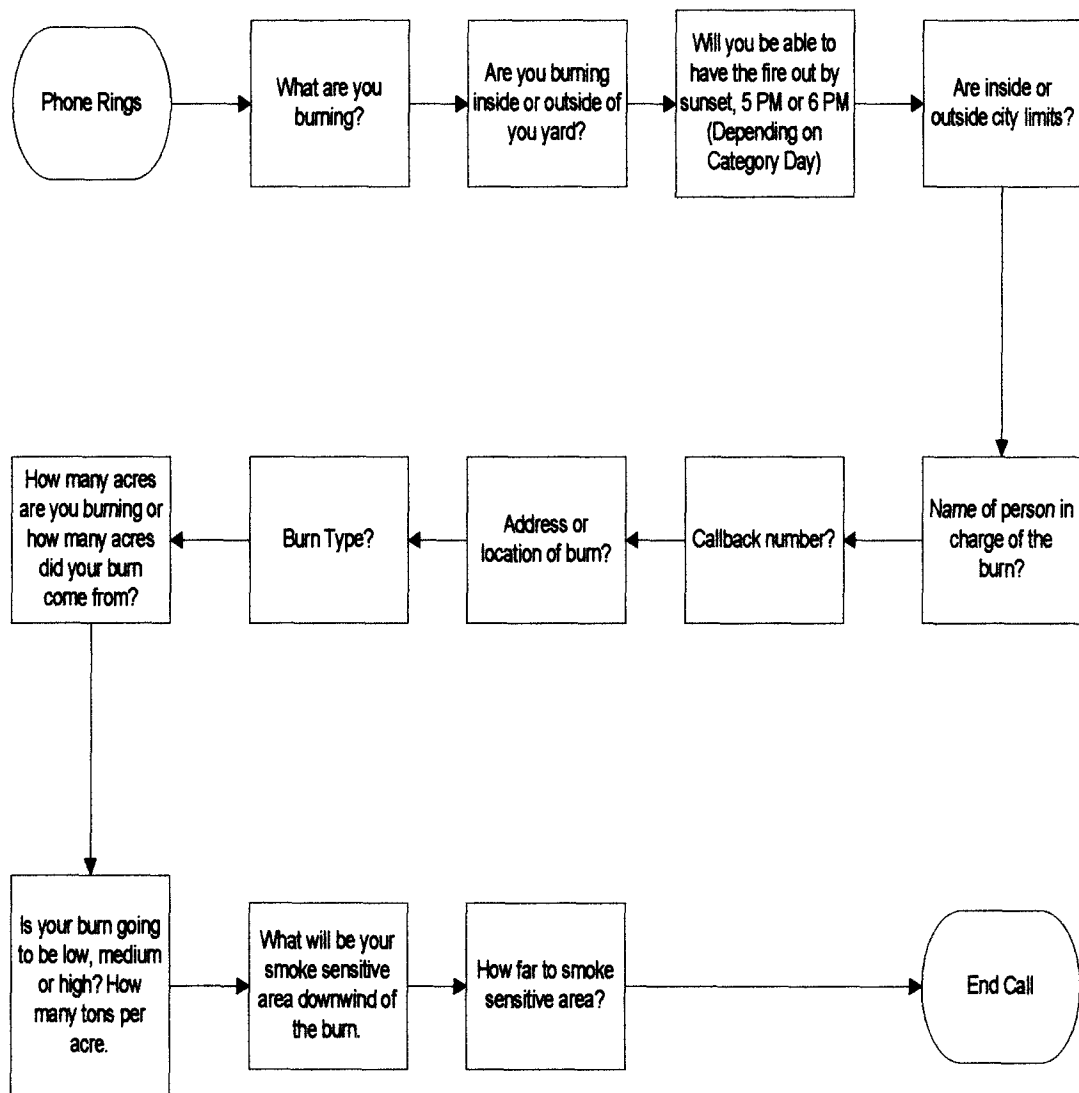
Pee Dee Notification Flow 3



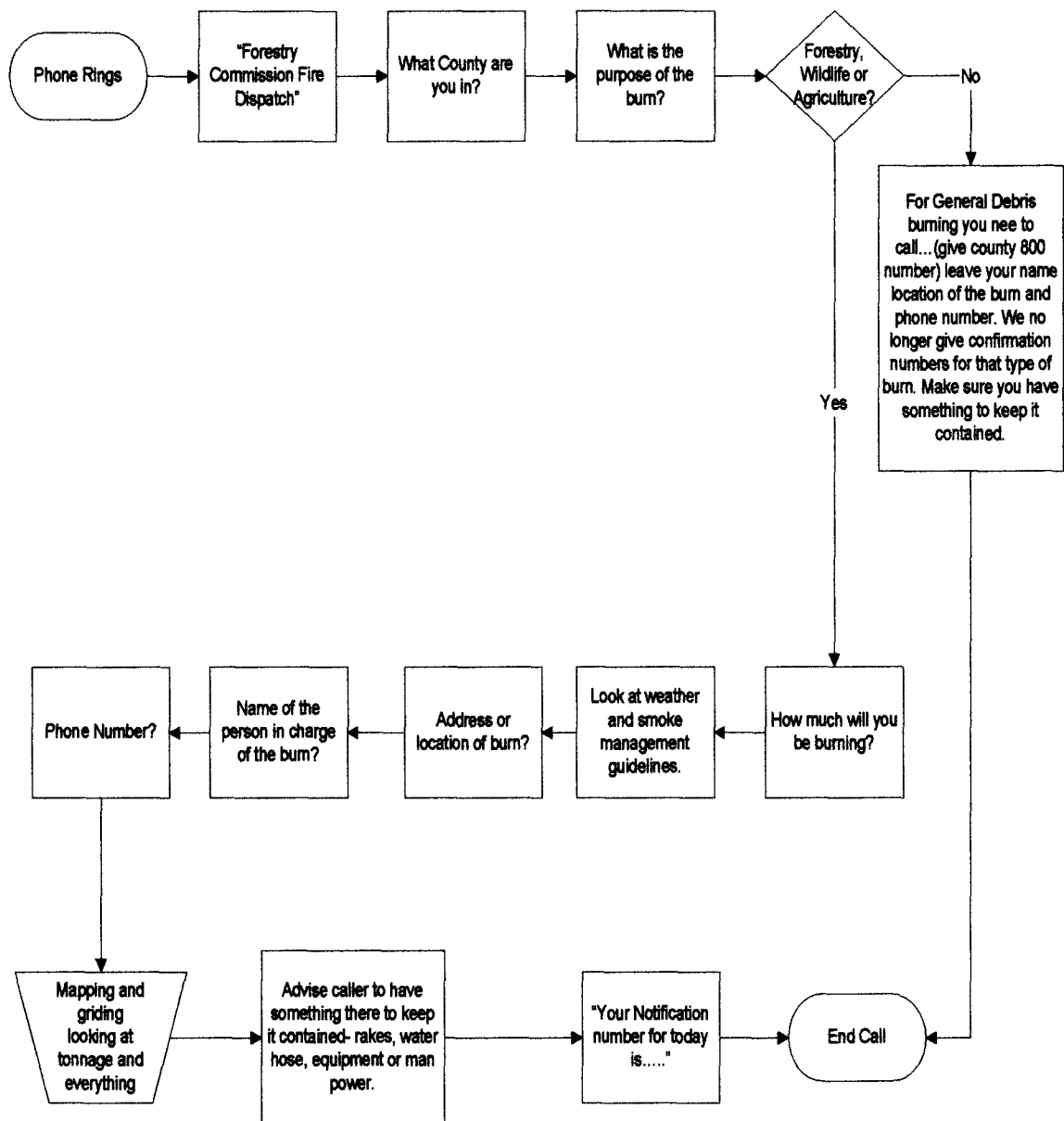
Pee Dee Notification Flow 4



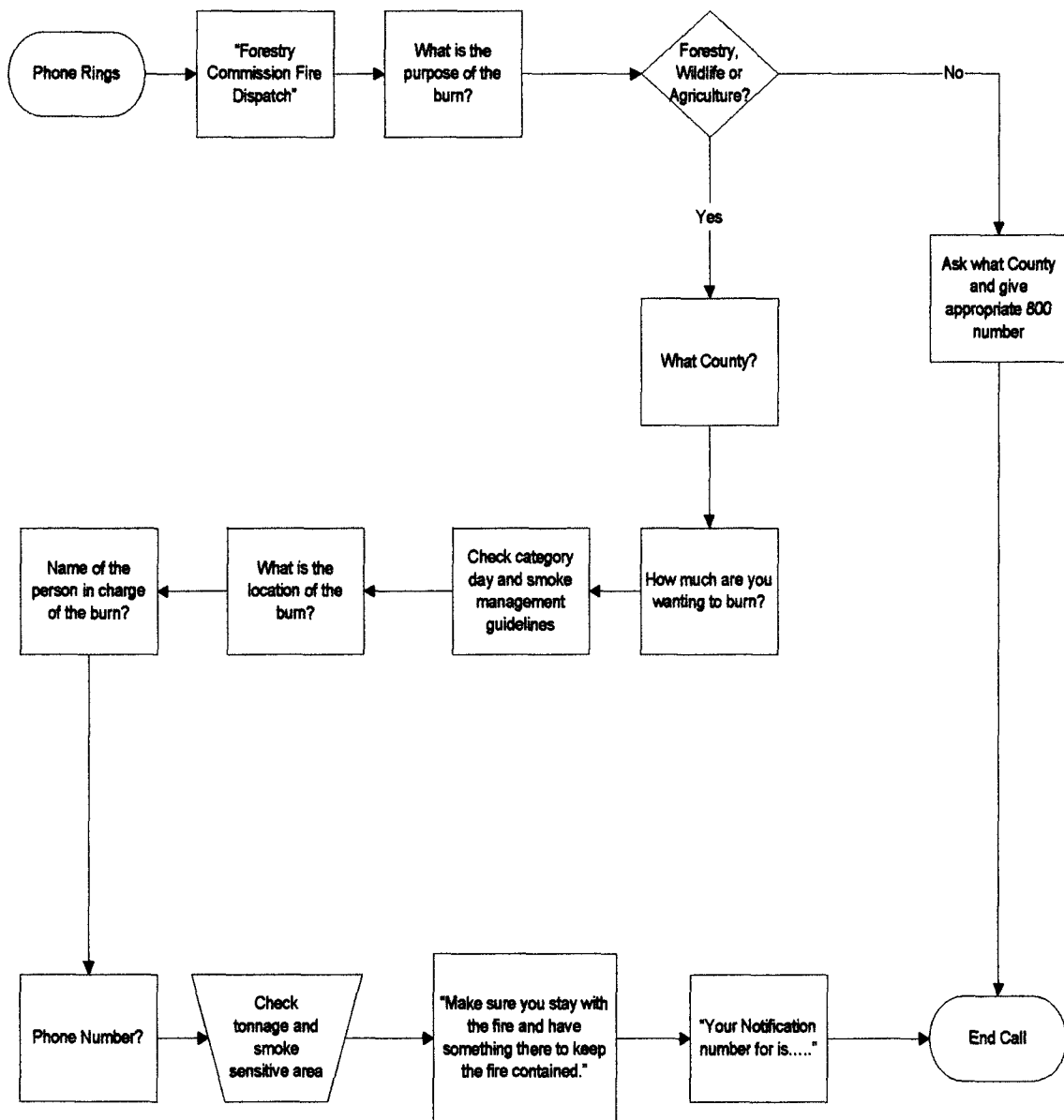
Pee Dee Notification Flow 5



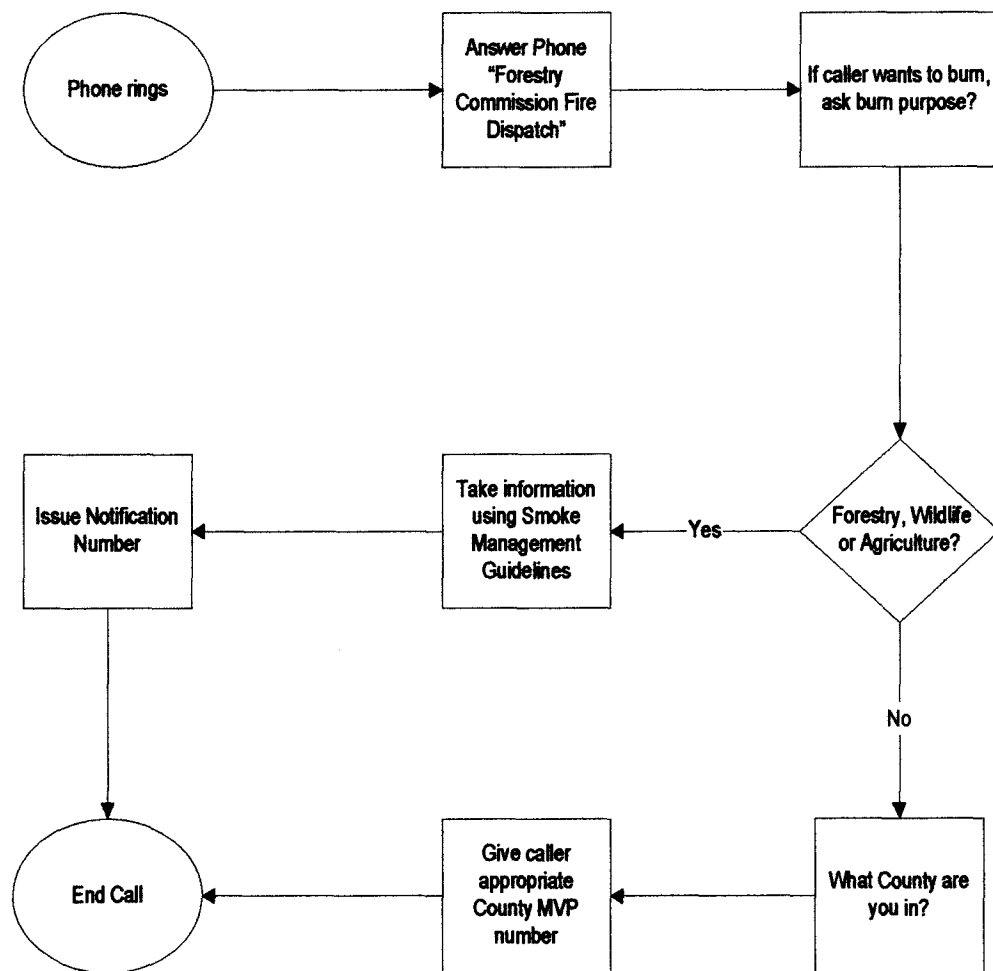
Piedmont Notification Flow 1



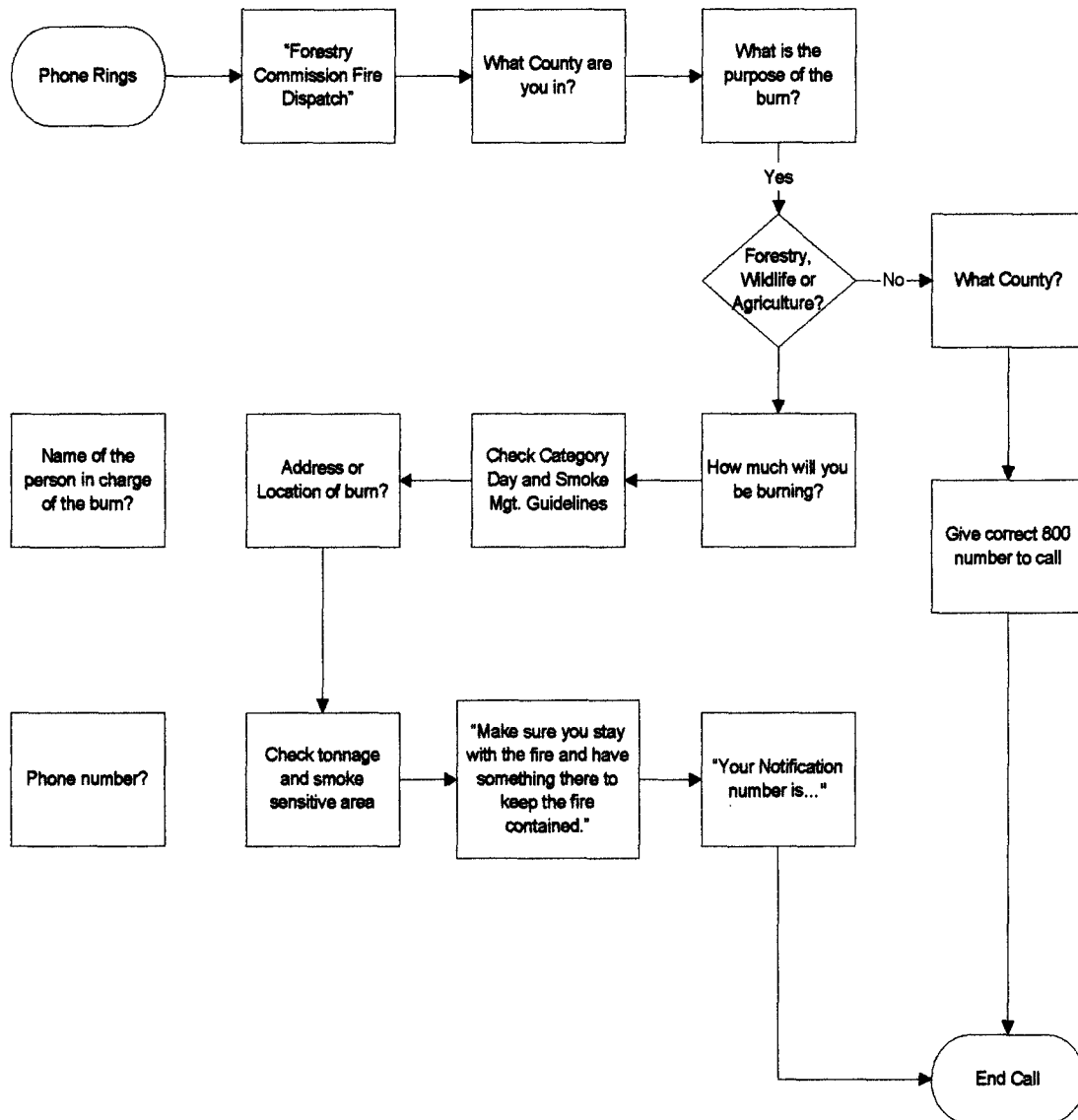
Piedmont Notification Flow 2



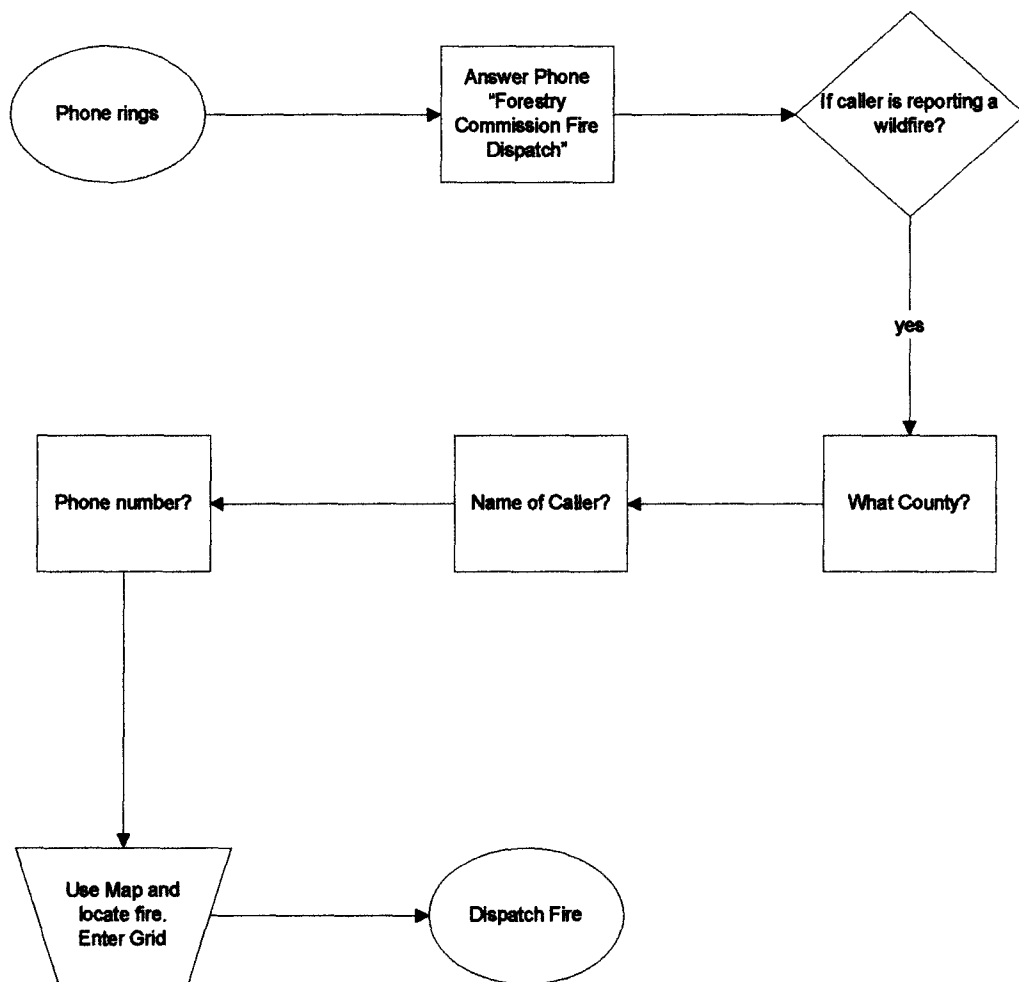
Piedmont's Notification Flow 3



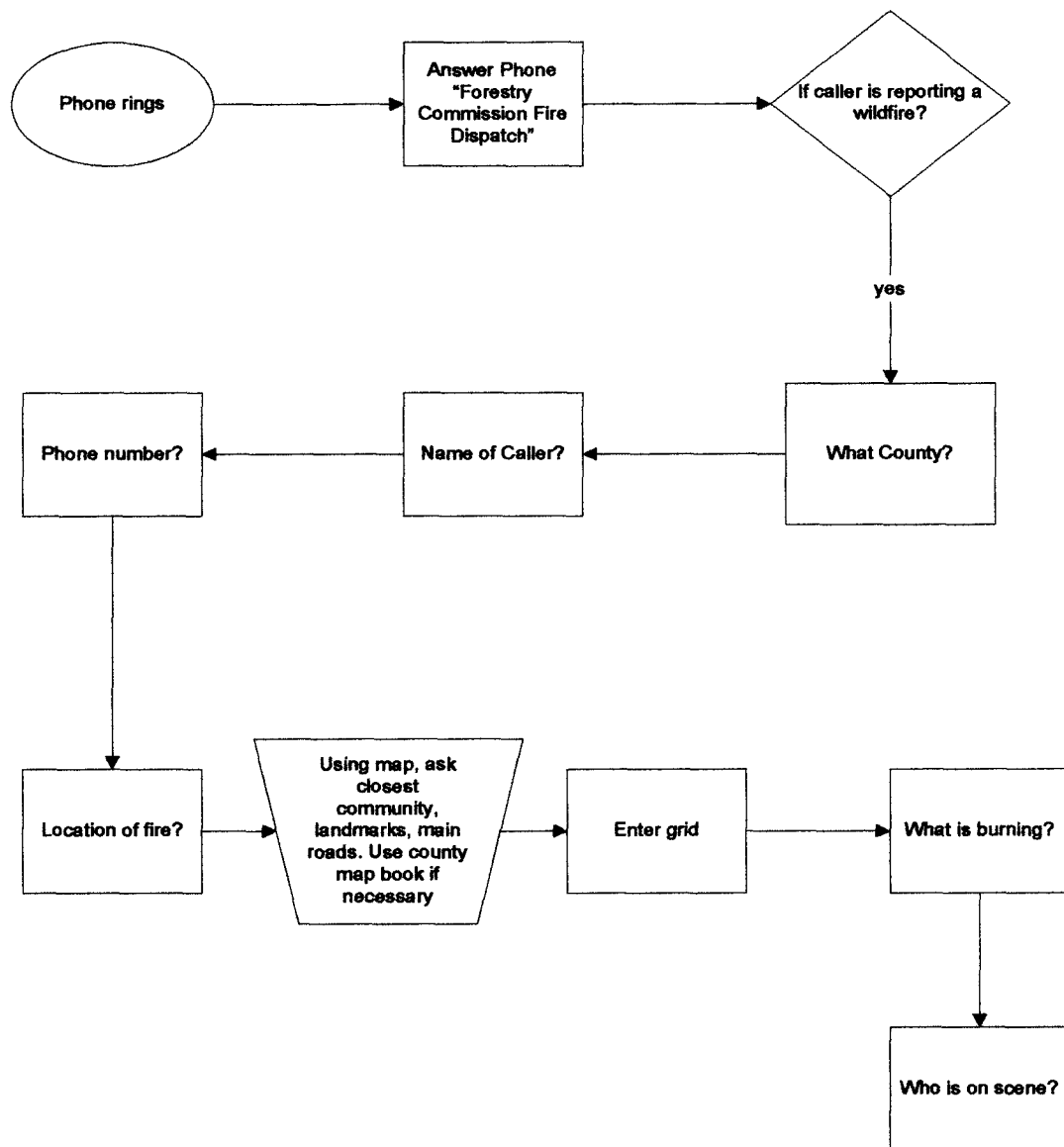
Piedmont's Notification Flow 4



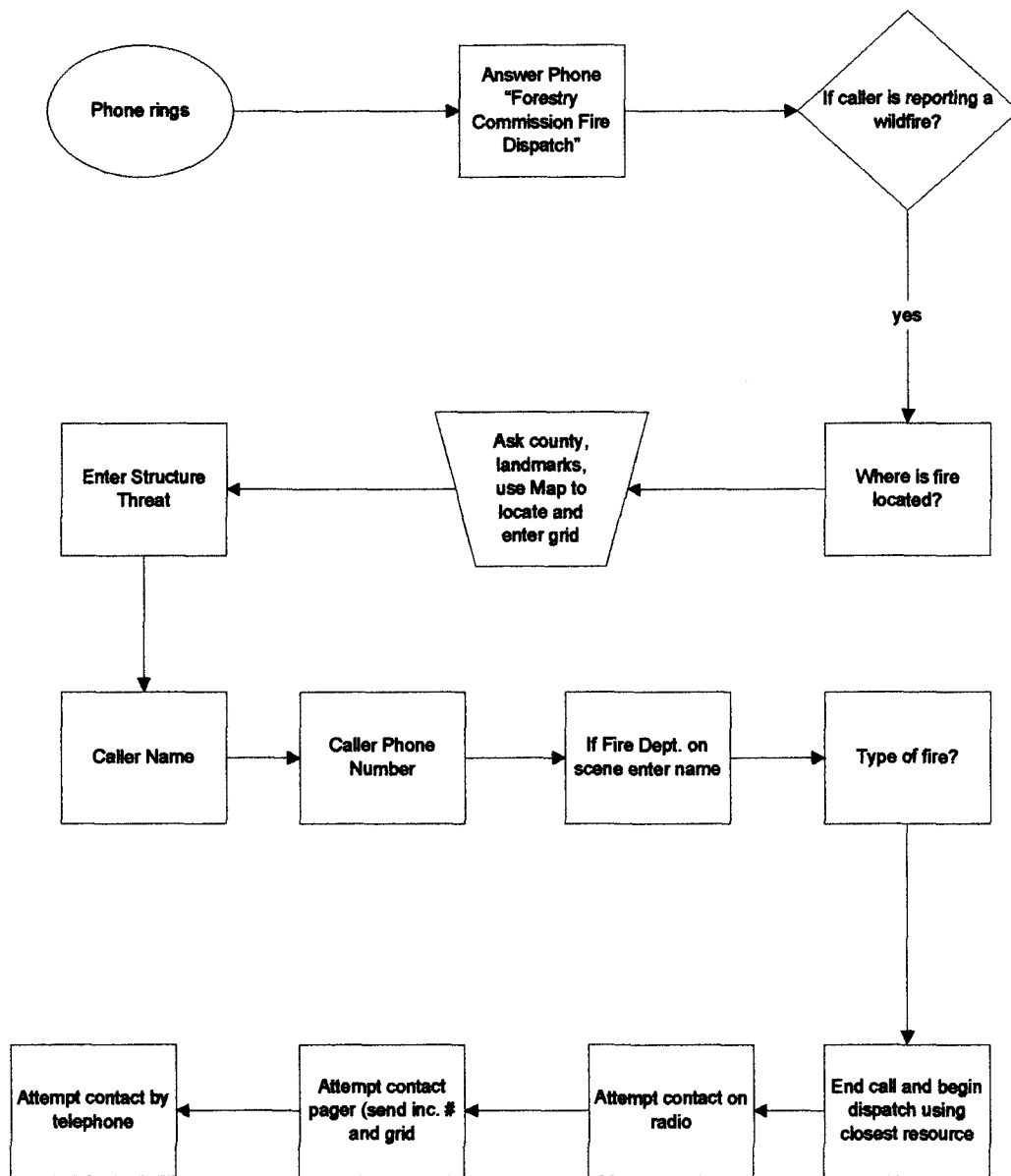
Coastal Fire Flow 1



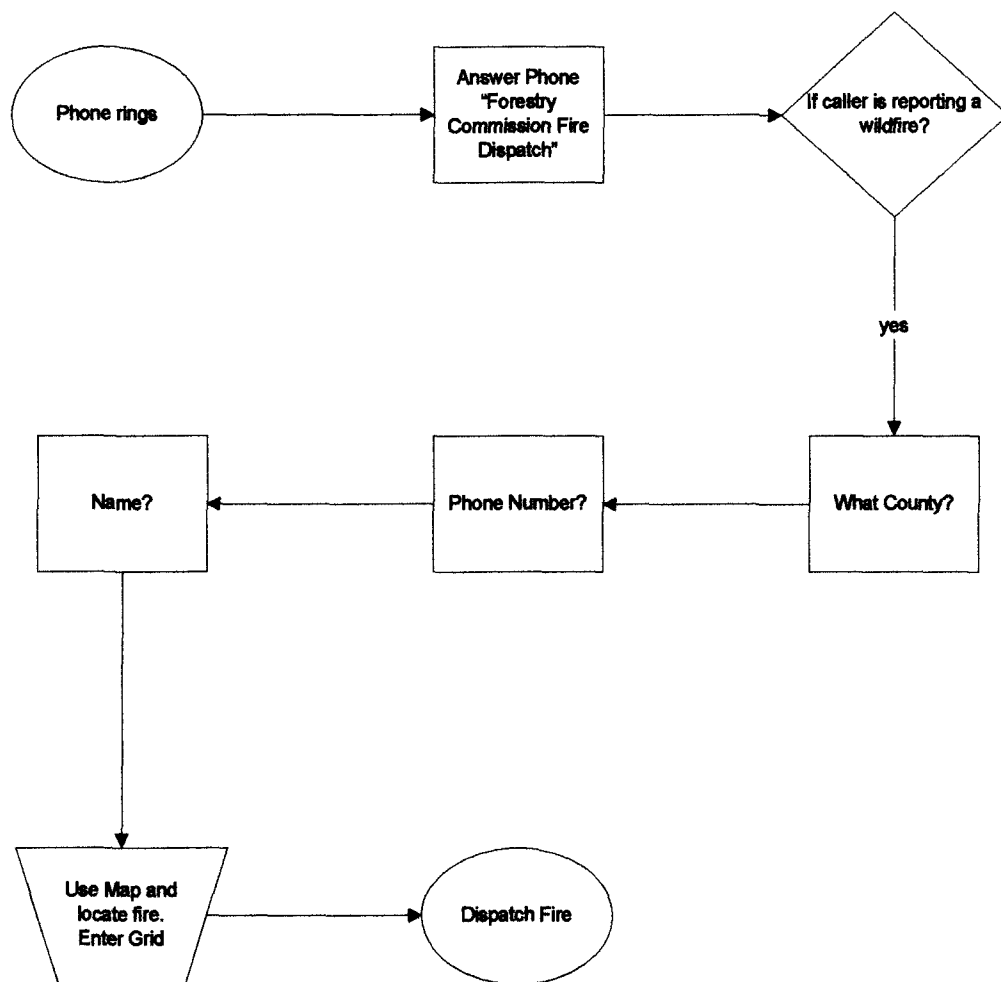
Coastal Fire Flow 2



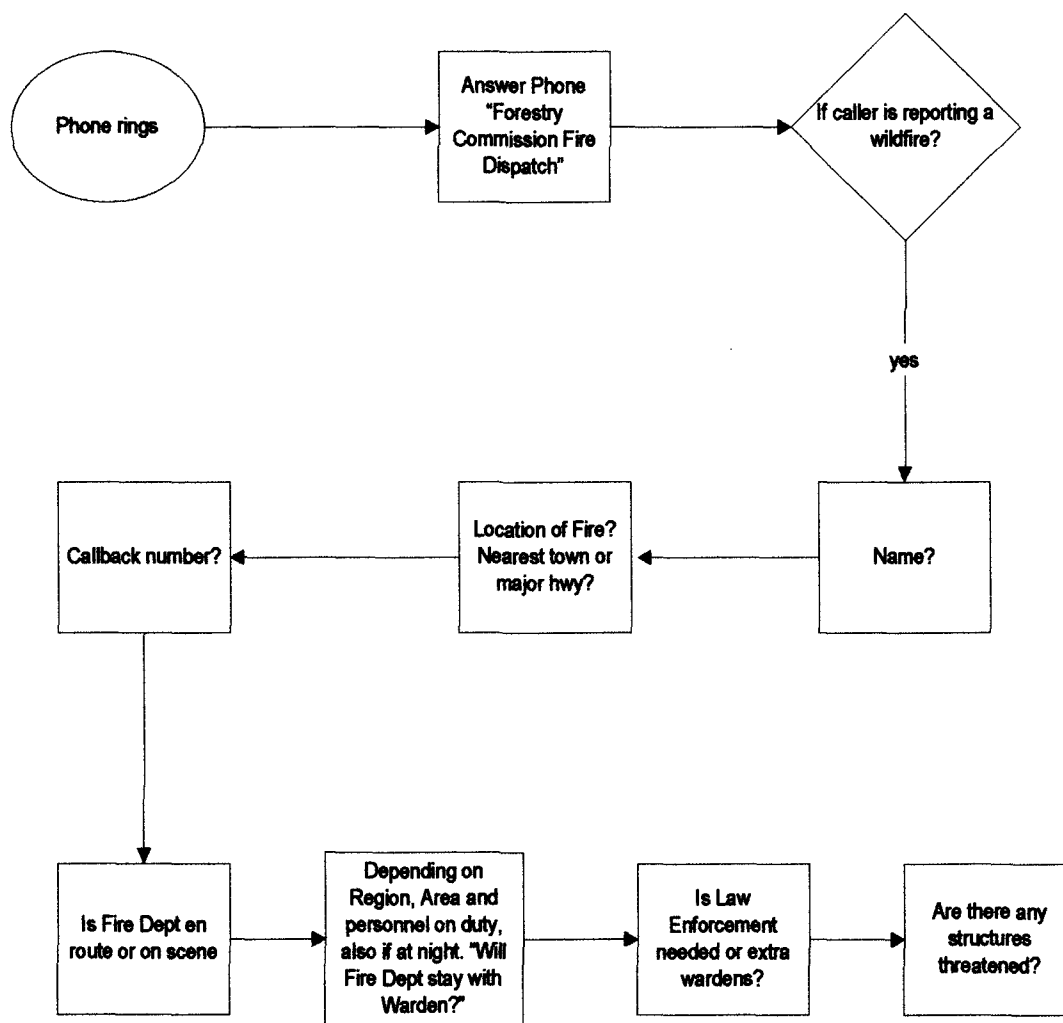
Coastal Fire Flow 3



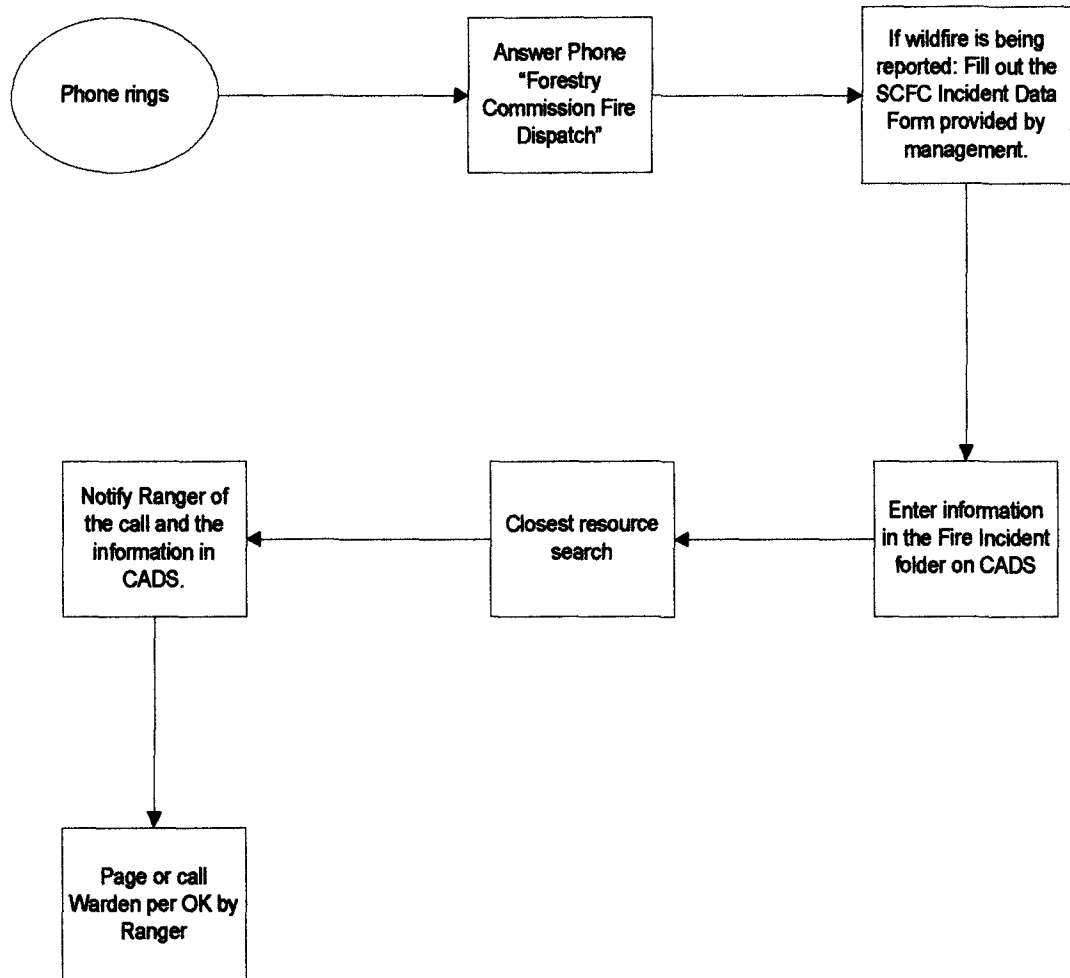
Coastal Fire Flow 4



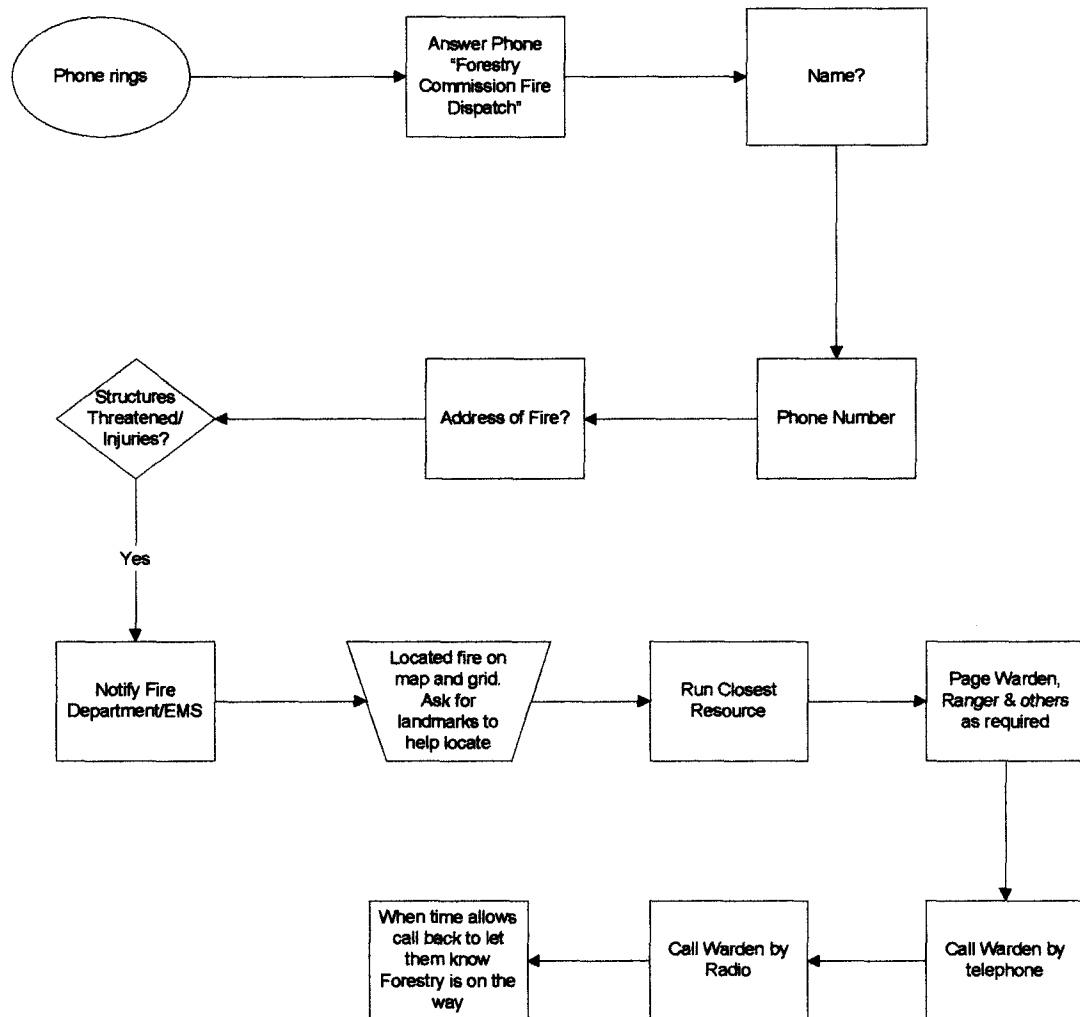
Pee Dee Fire Flow 1



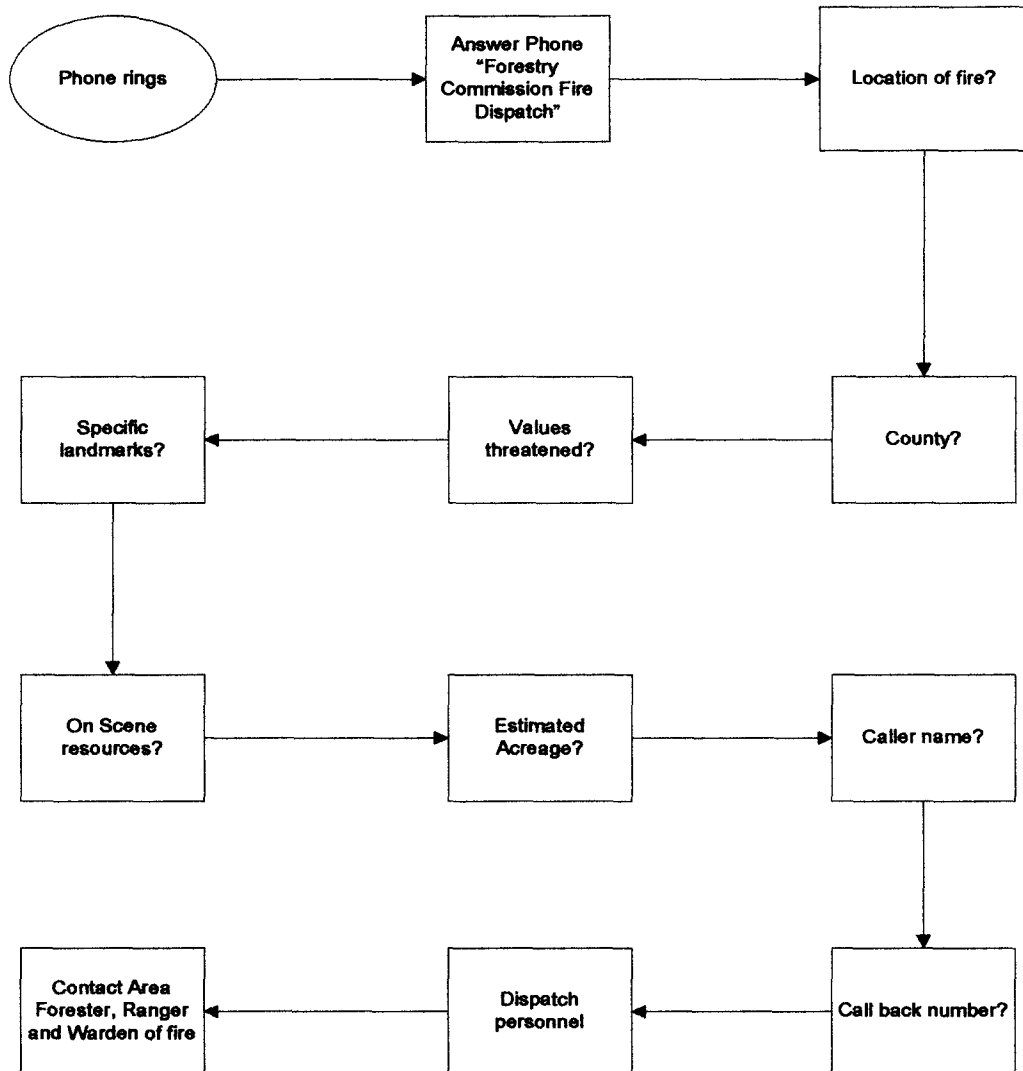
Pee Dee Fire Flow 2



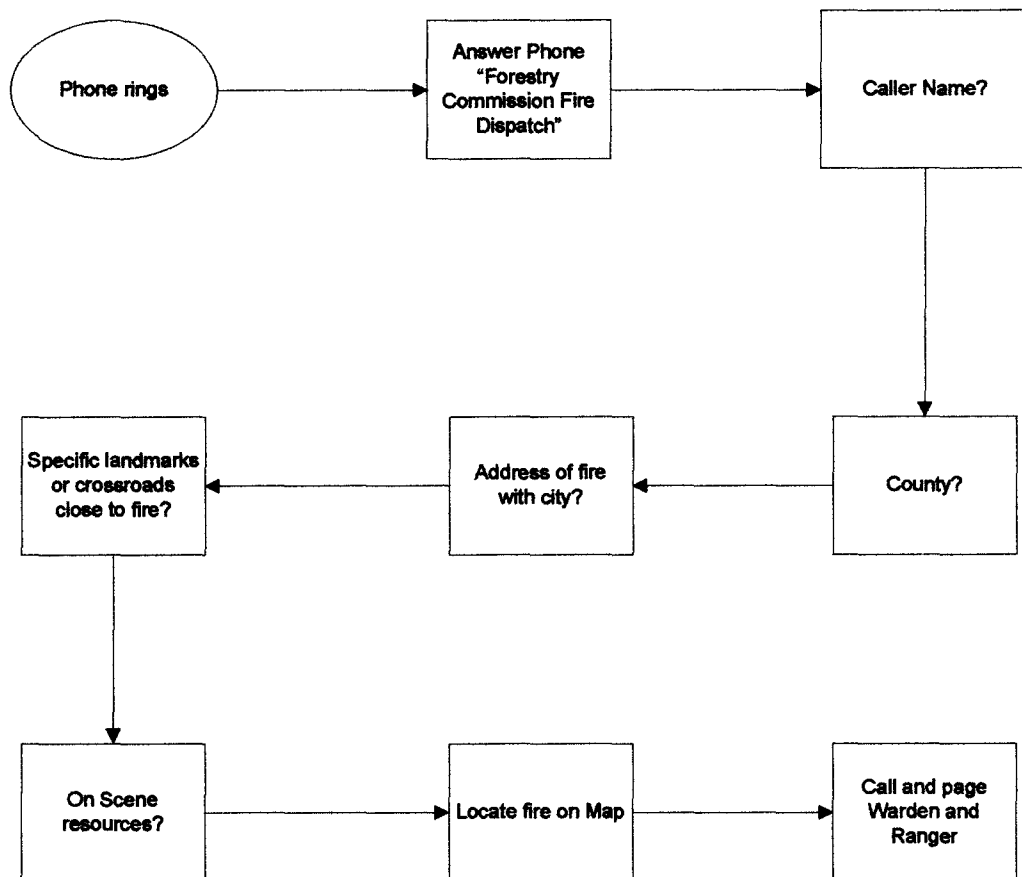
Pee Dee Fire Flow 3



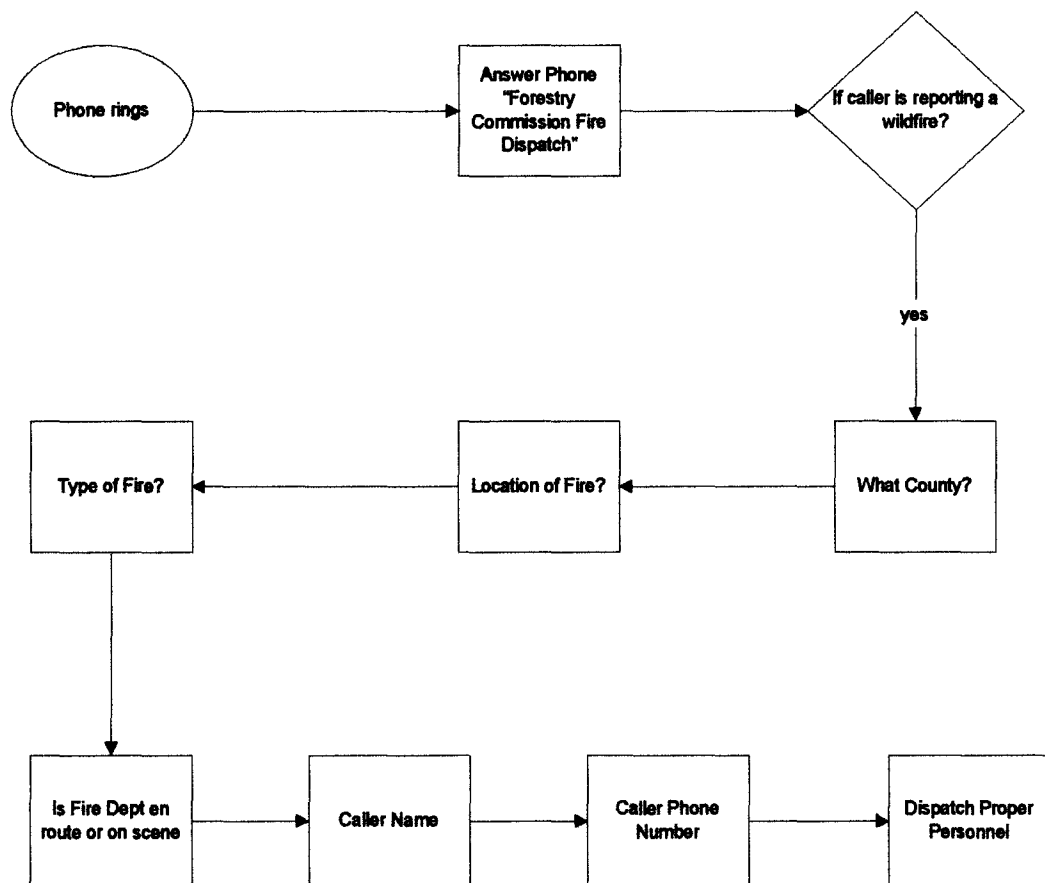
Pee Dee Fire Flow 4



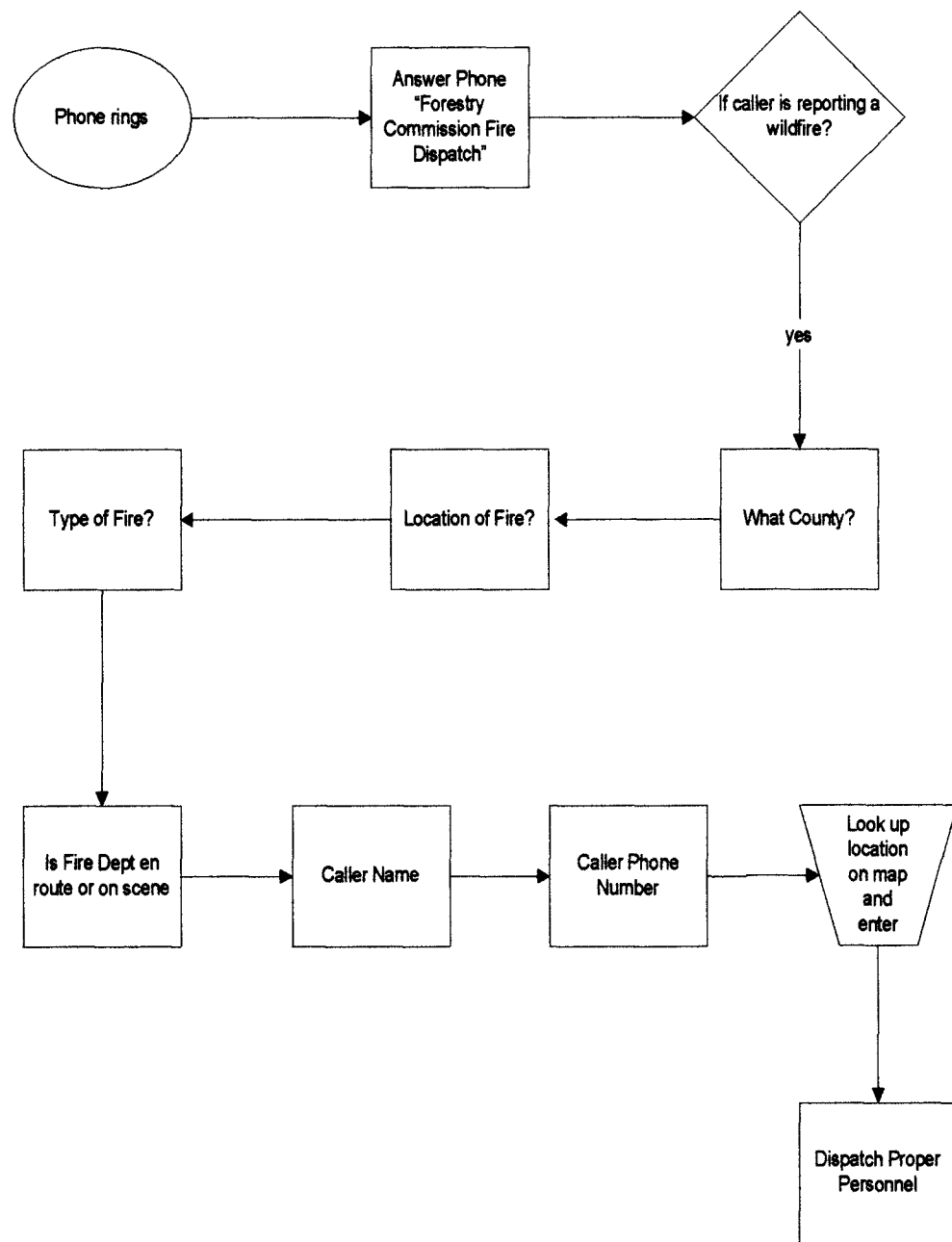
Pee Dee Fire Flow 5



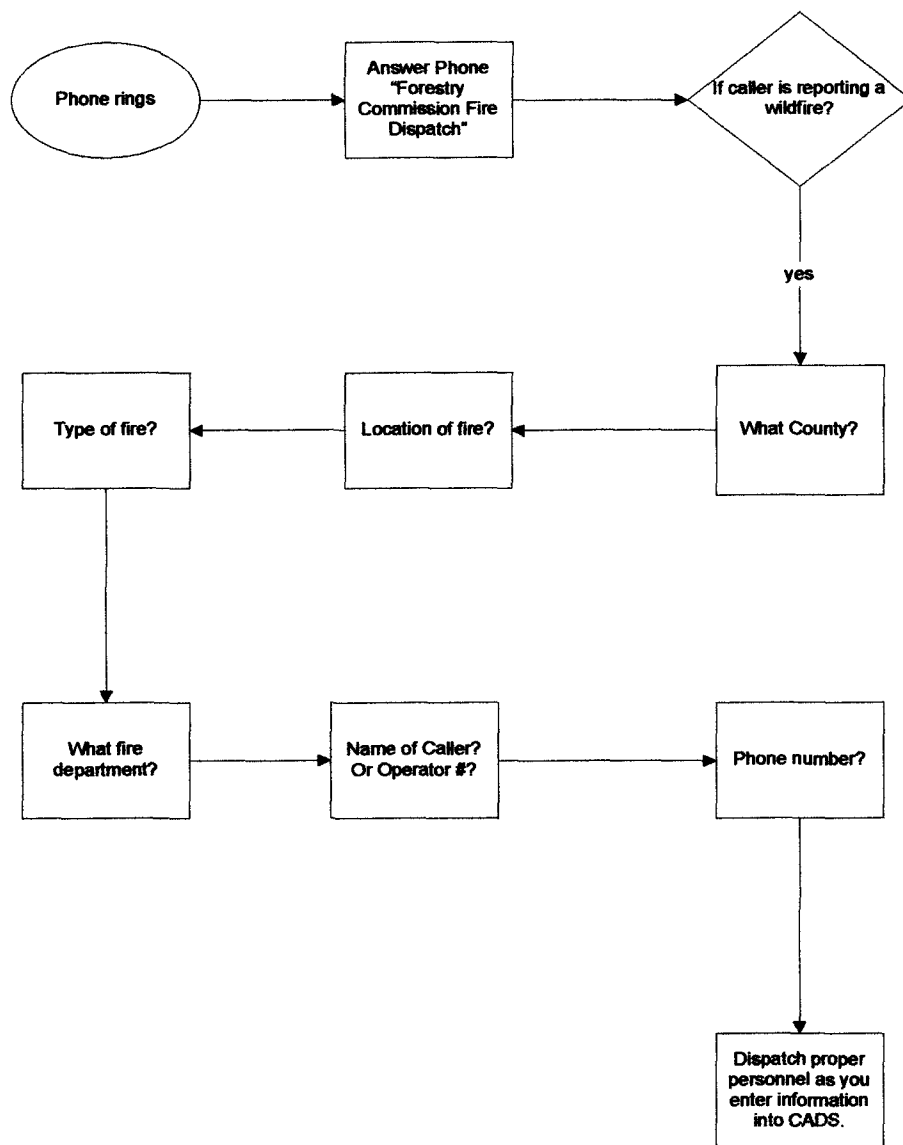
Piedmont Fire Flow 1



Piedmont Fire Flow 2



Piedmont Fire Flow 3



Appendix C
Software suggestions

Appendix C

Software Suggestions

Suggestions are categorized based on which aspect of fire control operations will most benefit from their integration into a new system.

Planning:

- ⇒ Ability to query fire occurrence map by time period and size class
- ⇒ Ability to name a fire
- ⇒ Ability to generate a federal fire report
- ⇒ Ability to calculate fire behavior
- ⇒ Ability to view photo mapping
- ⇒ Fire break rehab, Best Management Practices (BMP) follow-up on sites prone to erosion
- ⇒ Ability to document fires in wildland urban interface
- ⇒ Ability to calculate fire acreage with input from real time GPS (Global Positioning System) on equipment
- ⇒ Improve overall connectivity between CADS and database mapping
- ⇒ Ability to view multiple dispatches of a unit to a single incident
- ⇒ Ability to feed fire and situation reports to National Interagency Fire Coordination Center (NIFC)
- ⇒ Ability to integrate National Fire Danger Rating System (NFDRS) information pertinent to each incident into Computer Aided Dispatch System (CADS)

Operations:

- ⇒ Improved handling of equipment and personnel qualifications
- ⇒ More integrated smoke management capability
- ⇒ Ability to open, simultaneously, a fire incident window and a notification window
- ⇒ Aircraft and equipment tracking by GPS
- ⇒ Ability to create a complaint log
- ⇒ Ability to calculate closest available resource to a wildfire by route instead of by air miles
- ⇒ Ability to include “size up” [fire assessment and growth potential] on incident reports
- ⇒ Smoke hazard mapping layer, in fact any layers available that would identify hazards

Logistics:

- ⇒ Ability to create a support log which would record, per incident, request for mechanics, communication technicians or equipment problems
- ⇒ Ability to preview and print specific dispatch data by individual
- ⇒ Incorporation of Incident Command System (ICS)
- ⇒ Ability to track personnel and equipment separately
- ⇒ Ability to incorporate Resource Ordering and Status System (ROSS), a web based application used by U.S. Forest Service
- ⇒ Ability to preview and track Red Card resources and out-of-state dispatching
- ⇒ Ability to record daily duty status and capture changes made throughout the day
- ⇒ Ability to track non-SCFC resources

Quality Control:

- ⇒ Ability to create reports which incorporate data from CADS with availability to non-CADS users.
- ⇒ Ability to require selection of detection method
- ⇒ Ability to sort non-emergency dispatches by region, area or county
- ⇒ Improved levels of editing ability for data entry (Ex: dispatcher, administrator)
- ⇒ Paging software/application pulled from CADS and not separately, with ability to dump data to an Access database for availability to non-CADS users
- ⇒ Ability to track dispatcher entry
- ⇒ Ability to receive/record/search "other" burn types should Modulated Voice Processor (MVP) system fail. Data should be kept in separate table from smoke management notifications
- ⇒ Require weather table to sort weather data into separate fields for search capabilities
- ⇒ Record weather information on notifications
- ⇒ Ability to show property loss values
- ⇒ Ability to sort fires and notifications using weather criteria
- ⇒ Ability to incorporate fire weather forecast and fire danger readings into incident reports
- ⇒ Ability to access, preview and print extended attack resources and organization from CADS real time rather than separate entries
- ⇒ Ability to report fires controlled by U.S. Forest Service only
- ⇒ Ability to direct links from 911 centers to SCFC dispatch centers
- ⇒ Simplify steps required to dispatch, reduce number of screens

- ⇒ Explore alternatives to pager system
- ⇒ More intuitive data flow
- ⇒ Ability to accept queries and deliver basic reports over the network
- ⇒ Required fields with error checking to prevent inaccurate data entry
- ⇒ Keyboard shortcuts and “hot keys” to industry software standards
- ⇒ Ability to view call sign of Incident Commander and total number of units on scene from the active incident screen
- ⇒ Ability to choose more than one activity for non-emergency dispatches or ability to change activity
- ⇒ Ability to filter notifications and fires by region, area and county
- ⇒ Ability to preview all pages of incident summary from the system
- ⇒ Automatically clear previous days notifications
- ⇒ Ability to record all attempted dispatches
- ⇒ Ability to track rainfall as reported by field personnel
- ⇒ Ability to cancel notification and discern cancelled notifications from actual completed burns
- ⇒ Automatic map refreshing

Appendix D

Screens

Actions & Conditions Screen (Main)

The screenshot shows a software interface with a title bar at the top containing the text "Actions & Conditions" and a window control icon. Below the title bar is a tabbed interface with the following tabs: "Actions & Conditions", "Active Projects", "Active Projects", "Active Projects", and "Resource Dispatches". The "Actions & Conditions" tab is active.

Inside the active tab, there are several sections:

- Actions:** Contains two buttons: "Notification" and "Dispatch".
- Current Conditions:** Contains three buttons: "Display Current Weather Forecast", "Display Current Weather Station Readings", and "Display/Edit Readiness Levels".
- Personnel Locator:** Contains a text input field labeled "Name or Call Sign:" with the text "No Personnel Selected" inside. To the right of the input field are three buttons: "Locate", "Maintain Personnel Data", and "Page This Resource".
- Other Options:** Contains five buttons stacked vertically: "Initialization Parameters", "System Info", "System Administration", "Update Personnel Duty Flags", and "Change Password".

At the bottom of the screen, there are two buttons: "Refresh Map" and "Exit CADS".

Tab order:

- | | |
|---|---|
| 1. Actions & Conditions | 9. Display/Edit Readiness Levels |
| 2. Notifications | 10. Locate [brings up personnel search] |
| 3. Dispatch | 11. Maintain Personnel Data |
| 4. Appears to go nowhere | 12. Page This Resource |
| 5. Update Personnel Duty Flags | 13. Initialization Parameters |
| 6. Change Password | 14. System Administration |
| 7. Display Current Weather Forecast | 15. System Info |
| 8. Display Current Weather Station Readings | 16. Appears to go nowhere |
| | 17. Exit CADS |
| | 18. Refresh Map |

Problems:

- When selected System Info button brings up screen that displays social security number of the person logged on

CADS Notification **Current Notifications**

Smoke Management - Current Notifications

Choose Region and County to filter records:

☐ Coastal ☐ Pee Dee ☐ Piedmont ☐ **Southside**

Not. #	Burn Type	Caller Name	Called	Comp	Start	First Name	Last Name
0322599412	Field and Pasture	HAROLD ERWIN	01/28/03 16:20	<input checked="" type="checkbox"/>	16:25	Maria	Thomas
0311090264	Field and Pasture	H-4-4	01/28/03 16:11	<input checked="" type="checkbox"/>	14:00	Johnnie	Axson
0333065848	Field and Pasture	BEN FURQUERON	01/28/03 16:06	<input checked="" type="checkbox"/>	16:15	LINDA	HALL
0311090239	Field and Pasture		01/28/03 15:52	<input checked="" type="checkbox"/>	14:15	Nicole	Moultrie
0311090260	Field and Pasture	DAVID BEATY	01/28/03 15:48	<input checked="" type="checkbox"/>	16:00	Johnnie	Axson
0322599407	Hazard Reduction	BILLY ETHRIDGE	01/28/03 15:29	<input checked="" type="checkbox"/>	15:30	Maria	Thomas
0322599409	Hazard Reduction	LEONARD McLAIN	01/28/03 15:26	<input checked="" type="checkbox"/>	16:00	ELLA	COLCLOUGH
0311090252	Field and Pasture	HERBERT LEE	01/28/03 15:19	<input checked="" type="checkbox"/>	16:00	Johnnie	Axson
0322599389	Field and Pasture	LUKE CLARK	01/28/03 14:50	<input checked="" type="checkbox"/>	14:50	CAROL	WEATHERFORD
0322599388	Field and Pasture	JOHNNY JONES	01/28/03 14:50	<input checked="" type="checkbox"/>	16:00	ELLA	COLCLOUGH
0311090249	Field and Pasture	DIANNE ADDISON	01/28/03 14:48	<input checked="" type="checkbox"/>	15:00	Johnnie	Axson
0311090247	Hazard Reduction	RODNEY MALPHRUS	01/28/03 14:47	<input checked="" type="checkbox"/>	15:00	Nicole	Moultrie
0311090245	Piled Debris	JOYCE AND CM GAN	01/28/03 14:42	<input checked="" type="checkbox"/>	15:00	Natalie	Driggers
0311090239	Hazard Reduction	BILL YOUNIS	01/28/03 14:34	<input checked="" type="checkbox"/>	15:00	Nicole	Moultrie
0322599385	Field and Pasture	BOBBY ELLIOTT	01/28/03 14:34	<input checked="" type="checkbox"/>	15:15	ELLA	COLCLOUGH

Notification records found: 190

Double-click to change acres to be burned

Callback #: 843-726-8695

Address: HWY 462 EAST OF PINLAND

Smoke-Sens. Area: HWY 278

Distance: 8 County: Jasper County

Acres: 15

Total Tons: 30

Latitude: 32 deg 37 min 8 sec

Longitude: 81 deg 8 min 4 sec

CADS Notification Completed Notifications

CADS Notification - Completed Notifications

Choose Region and County to filter records:

☐ Coastal
 ☐ Pee Dee
 ☐ Piedmont

Not. #	Burn Type	Caller Name	Called	Comp	Start	Finish	First Name	Last Name
032259929	Wildlife Management	FRED POWELL	01/28/03 10:06	✓	10:30	13:02	CAROL	WEATHERFORD
0333065802	Hazard Reduction	N-4-1	01/27/03 16:38	✓	16:45	00:02	TRACY	FULMER
031108999	Field and Pasture	WENDEL CARSON	01/27/03 16:27	✓	16:30	00:02	Brenda	O'Connor
0311089990	Field and Pasture	GARY WRIGHT	01/27/03 16:20	✓	16:40	00:02	Sarah	Tuttle
0322599226	Field and Pasture	LEONARD McLAIN	01/27/03 16:09	✓	16:15	00:02	Maria	Thomas
0311089987	Field and Pasture	DAVID FORT	01/27/03 16:02	✓	16:01	00:02	Sarah	Tuttle
0311089984	Piled Debris	JOE CARTER	01/27/03 15:23	✓	15:30	00:02	Jan	Cain
0311089980	Field and Pasture	JOHN RICE	01/27/03 14:55	✓	15:15	00:02	Jan	Cain
0311089971	Field and Pasture	WILLIAM BLANTON	01/27/03 14:53	✓	15:00	00:02	Brenda	O'Connor
0311089979	Wildlife Management	JUSTIN RICKENBAK	01/27/03 14:46	✓	14:45	00:02	Jan	Cain
0311089972	Hazard Reduction		01/27/03 14:35	✓	14:30	00:02	Jan	Cain
0322599216	Hazard Reduction	HOUSH	01/27/03 14:23	✓	14:30	17:10	Maria	Thomas
0311089973	Field and Pasture	WILLIAM BOOKHAR	01/27/03 14:21	✓	14:30	00:02	Sarah	Tuttle
0322599213	Field and Pasture	p. cribb	01/27/03 14:15	✓	14:40	00:02	Maria	Thomas

Notification records found: 2307

Callback #: 843-538-3363
 Acres: 113

Address: WESTVACO
 Total Tons: 339

Smoke-Sens. Area: RD 15
 Latitude: 32 deg 39 min 28 sec

Distance: 1
 County: Jasper County
 Longitude: 81 deg 4 min 32 sec

Tab order:

1. Statewide
2. Coastal
3. Pee Dee
4. Inherit General Info [places data in general information screen]
5. Piedmont
6. Drop down to choose County [left of Statewide button]
7. Cancel
8. OK
9. Refresh

CADS Main Active Incidents

☐ Coastal
 ☐ Pee Dee
 ☐ Piedmont

Incident #	Incident Type	Initial Report	Contained	First Name	Last Name
032109724	Fire	01/26/03 11:36:24	00:00:00 00:00:00	BUNNIE	WEATHERFORD
03365144	Fire	01/26/03 14:55:39	01/26/03 17:38:43	NANCY	LEE
032109521	Fire	01/20/03 15:36:37	01/20/03 17:04:01	Maria	Thomas
032109483	Fire	01/20/03 07:59:28	01/20/03 08:32:30	Maria	Thomas

Incident records found: 4

Right-click to view active dispatches
 Double-click on an incident to view/edit

Caller:
 Latitude: deg min sec

Callback #:
 County:
 Longitude: deg min sec

Address:

- Displays list of active incidents.
- Ability to edit lat/long

Active Dispatches

Active Dispatches for Incident 03133400

Call Sign	Incident #	County	Enroute Time	Arrive Time	Available Time
H-4-5	03133400	Hampton County	16:38:26	00:00:00	16:39:12
H-1	03133400	Hampton County	16:21:53	16:34:45	00:00:00
H-2-1	03133400	Hampton County	16:20:23	16:34:33	00:00:00
H-2-3	03133400	Hampton County	16:17:17	16:34:53	00:00:00

Double-click a dispatch or click OK to view/edit selected dispatch
Incident-Related Dispatches found: 4

OK Cancel

Accessed from an active or inactive incident with resources attached.

CADS Main Inactive Incidents

Actions & Conditions Active Incidents Inactive Incidents Resolve Dispatches

Choose Region and County to filter records:

☐ Coastal
 ☐ Pee Dee
 ☐ Piedmont
 ☐ Statewide

Incident #	Incident Type	Initial Report	Controlled	First Name	Last Name
032109694	Fire	01/27/03 15:44:33	01/27/03 15:59:10	TRACY	WILKERSON
032109652	Fire	01/26/03 13:39:57	01/26/03 15:28:09	Yolonda	Holmes
03133291		01/24/03 12:52:51	01/24/03 15:25:23	Jan	Cain
032109629	Fire	01/23/03 17:59:34	01/23/03 20:14:00	PATRICIA	HEPBURN
03365128	Fire	01/23/03 10:41:47	01/23/03 11:09:31	TRACY	FULMER
03364927	Fire	01/11/03 16:29:37	01/26/03 13:34:19	KAREN	HARDEE

Incident records found: 6

Right-click to view active dispatches
Double-click on an incident to view/edit

Caller: Kershaw 911
 Latitude: 34 deg 5 min 12 sec

Callback #: 803-426-7671
 Longitude: 80 deg 43 min 16 sec

County: Kershaw County

Address: 1698 Koon Rd

Tab order:

1. Statewide
2. Coastal
3. Pee Dee
4. Piedmont
5. Edit Lat/Long
6. Caller [no entries can be made here]
7. Callback # [no entries can be made here]
8. Drop down menu to choose County [left of Statewide button]
9. County [no entries can be made here]
10. Appears to go nowhere
11. Exit CADS
12. Refresh Map

Problems:

- Tabs numbered 6, 7, and 9 do not accept entries

CADS Main Completed Incidents

Choose Region and County to filter records:

☐ Coastal
 ☐ Pee Dee
 ☒ Piedmont

Incident #	Incident Type	Initial Report	Controlled	First Name	Last Name
03365172	Fire	01/26/03 09:42:01	01/28/03 10:49:54	KATHY	GRiffin
03365166	Fire	01/27/03 16:51:11	01/27/03 17:39:13	TRACY	FULMER
03365163	Fire	01/27/03 16:07:08	01/27/03 17:47:19	TRACY	FULMER
03365162		01/27/03 13:58:13	01/27/03 13:59:43	TRACY	FULMER
03365160	Fire	01/27/03 12:50:07	01/27/03 13:27:10	TRACY	FULMER
03365159	Recheck Fire	01/27/03 11:10:58	01/27/03 12:51:34	TRACY	FULMER
03365145	Fire	01/26/03 15:02:16	01/26/03 15:43:43	LISA	STRIBBLE
03365143	Fire	01/26/03 13:56:20	01/26/03 18:15:58	KAREN	HARDEE
03365142	Fire	01/26/03 13:18:39	01/26/03 13:29:48	NANCY	LEE
03365137	Recheck Fire	01/25/03 08:43:15	01/25/03 11:53:00	LISA	STRIBBLE
03365133	Fire	01/24/03 19:17:26	01/24/03 20:01:24	TOMOKA	JOLLY
03365117	Recheck Fire	01/22/03 07:59:03	01/22/03 17:06:58	KAREN	HARDEE
03365113	Fire	01/21/03 18:17:20	01/21/03 18:24:51	TOMOKA	JOLLY
03365111	Fire	01/21/03 15:09:18	01/21/03 15:28:50	TOMOKA	JOLLY

Incident records found: 100 Double-click on an incident to view/edit

Caller:
 Latitude: deg min sec

Callback #:
 County:
 Longitude: deg min sec

Address:

Tab order:

1. Statewide
2. Coastal
3. Pee Dee
4. Piedmont
5. Edit Lat/Long
6. Caller [no entries can be made here]
7. Callback# [no entries can be made here]
8. County [no change can be made here]
9. Drop down to choose County [left of Statewide button]
10. Exit CADS
11. Refresh Map

Problems:

- Tabs numbered 6, 7, and 8 do not accept entries or editing

CADS Main Resource Dispatches

At-A-Glance: Home | Reports & Conditions | Resource Dispatches

Choose Region and County to filter records:
☐ Coastal ☐ Pee Dee ☐ Piedmont

Incident-Related Dispatches:

Call Sign	Dispatcher	Incident #	First Contact	Lat	Long	County	Enroute
L-1-4	MCILLESBAY	03365175	01/28/03 13:58	33 45 0	81 12 0	Lexington County	13:58
P-1-3	KGRIFFIN	03365174	01/28/03 13:14	34 34 46	82 43 14	Anderson County	13:22
P-1-1	KGRIFFIN	03365174	01/28/03 13:17	34 34 46	82 43 14	Anderson County	13:17
D-2-2	PD-26	032109735	01/28/03 13:57	34 38 4	79 57 38	Chesterfield County	14:02
D-2-1	PD-26	032109735	01/28/03 13:59	34 38 4	79 57 38	Chesterfield County	13:59
K-3-9	PD-26	032109733	01/28/03 13:01	33 39 0	79 46 0	Williamsburg County	13:09
K-1-5	COASTAL 30	03133389	01/28/03 13:31	33 23 23	80 17 30	Orangeburg County	13:42
O-4	COASTAL 30	03133389	01/28/03 13:32	33 23 23	80 17 30	Orangeburg County	13:32
MC-3-4	COASTAL 36	03133387	01/28/03 12:55	33 7 30	80 32 56	Dorchester County	13:08

Incident-Related Dispatches found: 10

Non-Emergency Dispatches:

Call Sign	Type	Entry Date	Lat	Long	Available
S-3-4		1/28/03 12:58:03	34 13 0	80 16 0	
B-1-6	Equipment Exercise	1/28/03 12:53:04	33 29 0	81 41 0	
PD-7	Other For. Mgmt.	1/28/03 12:45:52	33 41 0	80 9 0	
S-4-4	Prescribed Burn	1/28/03 12:40:49	34 3 0	80 32 0	
H-3-6	Work Detail	1/28/03 12:17:42	33 0 17	80 40 17	
S-4-2	Prescribed Burn	1/28/03 12:03:29	34 2 0	80 32 0	
M-2-5	Firebreak Plow	1/28/03 12:00:09	34 6 0	78 58 0	
MC-1-5	Firebreak Plow	1/28/03 11:31:48	33 8 0	79 57 0	
MC-1-7	Firebreak Plow	1/28/03 11:07:29	33 15 26	80 20 26	

Non-Emergency Dispatches found: 54

Double-click to view dispatch.
Right-click to view incident.

Refresh Map Exit CADS

Tab order:

1. Statewide
2. Coastal
3. Pee Dee
4. Piedmont
5. Refresh Non-Emergency Dispatches
6. Drop down to choose County [left of Statewide button]
7. To highlighted line in top half of screen
8. To highlighted line in bottom half of screen
9. Exit CADS
10. Refresh Map

Problems:

- o Non-Emergency Dispatches section does not filter/sort [bottom of screen]

Page Resource [for wildfire]

Page Resource

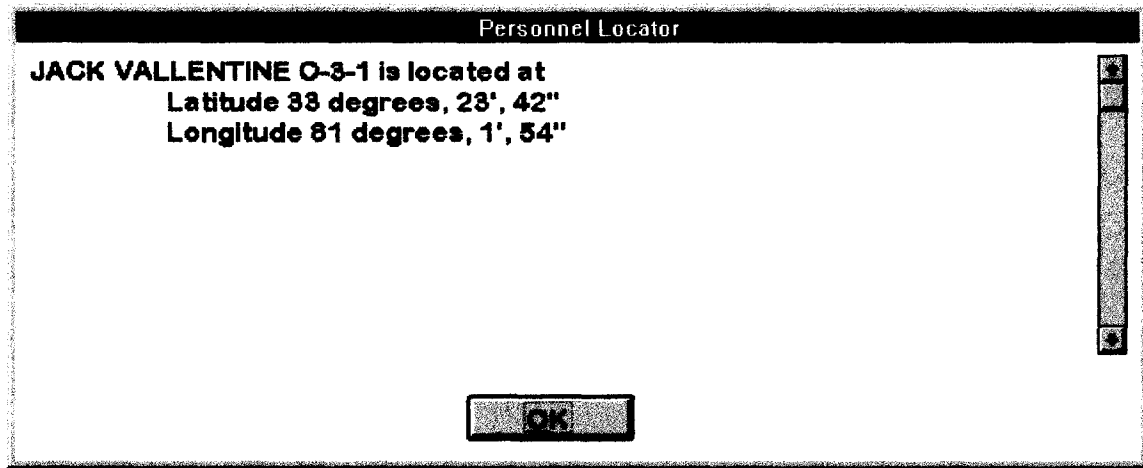
Pager number for Libby Martin COASTAL 15 at 843-961-2624

Incident #03133492
Latitude: 33 deg. 24' 30"
Longitude: 80 deg. 17' 30"

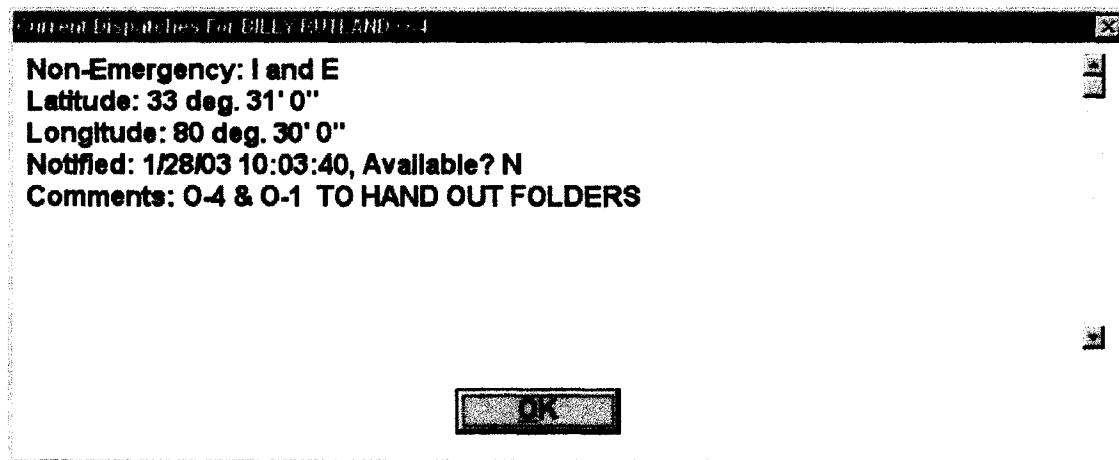
OK

This is the information that is copied, then pasted to Pagemaster.

Locate [From Main]

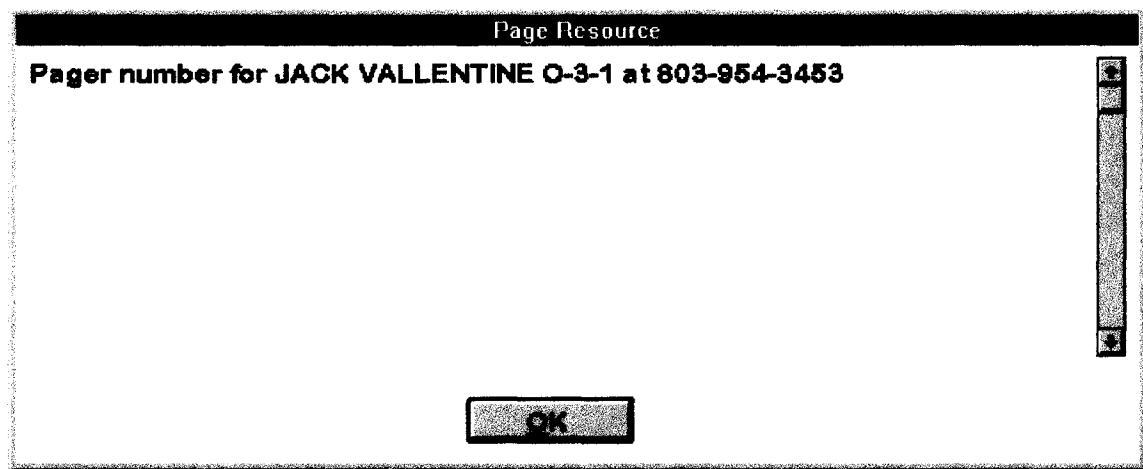


Appears in this way when the resource is at standby location.



Appears showing where the resource is located if not at standby location.

Page Resource [from Main]



Appears after selecting Page this resource button on the Actions & Conditions screen.

Personnel Maintenance

Personnel ID: 251841249		Phone: 803-536-2805	
First Name: WILLIAM		Alternate Phone: 000-000-0000	
Last Name: RUTLAND		Pager Number: 803-954-3458	
Middle Initial: S		Business Phone: 803-536-2805	
Preferred Name: BILLY		Primary RF:	
Call Sign: 0-4		Second RF:	
Position: Tech		Third RF:	
County: Orangeburg County		Primary Repeater: VANCE	
Area: Orangeburg Area		Second Repeater: NEESES	
Region: Coastal Regic		Third Repeater:	
State:		Latitude: 33	
HQ:		Minutes: 30	
Address 1:		Seconds: 3	
Address 2:		Longitude: 80	
City:		Minutes: 44	
Zip Code:		Seconds: 57	
Delete Flag: <input type="checkbox"/>			
On Leave: <input type="checkbox"/>			
On Call: <input type="checkbox"/>			
On Duty: <input checked="" type="checkbox"/>			
Save and Exit		Add New Personnel	
Cancel			

Tab order:

- | | | |
|-------------------|---------------------|--------------------|
| 1. Save and Exit | 14. Address 1 | 29. Primary |
| 2. Cancel | 15. Address 2 | Repeater |
| 3. Personnel ID | 16. City | 30. Second |
| [Social Security | 17. Zip Code | Repeater |
| Number] | 18. Delete Flag | 31. Third Repeater |
| 4. First Name | 19. On Leave | 32. Latitude |
| 5. Last Name | 20. On Call | 33. Minutes |
| 6. Middle Initial | 21. On Duty | 34. Seconds |
| 7. Preferred Name | 22. Phone | 35. Longitude |
| 8. Call Sign | 23. Alternate Phone | 36. Minutes |
| 9. Position | 24. Pager Number | 37. Seconds |
| 10. County | 25. Business Phone | 38. Add New |
| 11. Area | 26. Primary RF | Personnel |
| 12. Region | 27. Second RF | |
| 13. HQ | 28. Third RF | |

- o Administrative access only

Maintain Personnel Duty Flags [from Main]

Maintain Personnel Duty Flags by Region

☐ Coastal
 ☐ Pee Dee
 ☐ Piedmont
 ☒ Statewide

Last Name	Preferred Name	MI	Call Sign	On Duty	On Call	On Leave
SIMMONS	JOHN	C	B-1-2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
JACKSON	JIMMY	R	B-1-3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FOSTER	BUBBA	G	B-1-6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CHAMPAGNE	DERRIEL	C	B-2-1 HAS UNIT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SIMMONS	REYNOLD		B-2-3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KINARD	BRYAN	K	B-3-2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SMITH	HENRY	J	B-3-3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CABE	KEN	W	COLUMBIA 5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FORTE	TOM	W	CONSTRUCTION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GULLEDGE	KATHY		D-1-2(NEW)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FREEMAN	DALE	A	D-1-3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HODGE	DAVID		D-2-1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MUNN	MARK	C	D-2-2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KIRBY	FRED		D-2-3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LOWMAN	CHIP	C	D-2-4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ARNETTE	ALEX	B	D-3-2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MCNEIL	JERRY	L	D-3-3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Personnel Records: 158

Daily duty status recorded here. All three far right columns are overwritten on every edit.